Annual Report of the Department of Industries, Bombay Province 1943-44

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OFFICE OF THE DIRECTOR OF INDUSTRIES,
OLD CUSTOM HOUSE YARD, FORT:
Bombay, 21st September 1944.

From

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M.Sc.Tech. (Manch.), A.I.C. (Lond.), A.T.I. (Manch.),
In Charge, Director of Industries,
Bombay ;

To

THE SECRETARY TO GOVERNMENT,
General Department, Bombay.

SUBJECT :—*Annual Report.*

Sir,

I have the honour to submit herewith the Annual Report of the Department of Industries for the year 1943-44.

Your obedient servant,

S. D. VASHIST,
In Charge Director of Industries.

Encl. : Annual Report.

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CHAPTER I

GENERAL INDUSTRIAL OUTLOOK DURING THE YEAR.

REVIEW OF GENERAL CONDITIONS.

The industrial progress of the Province during the year continued to be satisfactory. Full employment prevailed in all the major industries of the Province. Due to heavy demands and dearth of many consumers goods for civilian use rise in prices of industrial goods was steep and continuous and the profit-margin was substantial. The prices of cloth and yarn were very high during the year and Government had to control them. Similarly Government had to control prices of many other articles of industry.

Conditions in the small-scale and cottage industries were not dissimilar. The production of small-scale and cottage industries increased and the demand for these goods was brisk.

CHAPTER II

WORK OF THE DEPARTMENT FOR ORGANISED INDUSTRIES.

INDUSTRIAL RESEARCH AND PRACTICAL DEMONSTRATION FOR THE BENEFIT OF INDUSTRIES.

2. The Department did considerable work for the organised industries in the Province during the year. The various chapters of this report give information about the work done. In the present chapter information is given covering the industrial research work done.

3. **Industrial Engineer's Workshop, Bombay.**—The work and activities of the Industrial Engineer's Workshop in connection with different industries continued during the year under review. Work as detailed below was done with regard to the manufacture of machines, fitments, hand-tools, etc.

Twelve wood turning lathes with two iron table frames each for six lathes were designed and completed with groved stop pulleys on 12 motors. These were supplied to the Technical Section of the Elphinstone High School, Bombay.

Four glass bangle jointing machines were manufactured and supplied to loanees under Loans and Subsidy Scheme mentioned elsewhere in this report.

Tool rest slide for fixing on lathe for cutting insulation tape was designed and manufactured.

Different fitments for the creation of the Raspador designed by this Department at Shrigonda Sisal Plantation were manufactured.

The manufacture of two wood turning lathes, four bangle grinding machines, pannels for controls for Producer Gas Plant, gun metal bush bearing, pestles and caps, etc., for Haskell Ghani was nearly completed.

The work of manufacturing 30 Haskell Ghanis for supplying same to Tellis of different districts was on hand when writing this report and is expected to be complete in the beginning of the next financial year.

Experiments on brazing tool steel tips on ordinary steel bars for making carbon steel tipped bars for working carbon steel tipped metal turning tools were conducted. Results achieved were very encouraging when 48 such tools were treated by this method in gas furnaces for the use of the War Technicians' classes at the Victoria Jubilee Technical Institute, Bombay.

Experiments on tempering and hardening fine threading dies for clocks were conducted with success.

Experimental work on enamelling metals in electric and gas furnaces and possibilities of the manufacture of fountain pens from ivory was in progress.

INDUSTRIAL CHEMIST'S LABORATORY, BOMBAY.

4. **Provincial Industrial Research Committee.**—The Provincial Industrial Research Committee which was provisionally appointed by Government for a period of two years in the first instance, has now been established on a permanent basis. One meeting was held on 22nd December 1943 which considered applications for research grants and two applications were forwarded with recommendation to Government. Rules for grants and rules of procedure for considering applications for research grants were drawn up by the Committee and forwarded to Government for approval.

INDUSTRIAL RESEARCH LABORATORIES, MATUNGA.

5. The construction of 'Industrial Research Laboratories, Matunga,' for housing the Industrial Chemist's Office, Laboratory and the Testing Laboratory was completed in October 1943, when the shifting of the equipment and machinery of Industrial Chemist's Laboratory in Old Custom House Yard to the new building was started. The fitting of the new Laboratories was sufficiently complete by the end of December and the normal work was commenced in the new building from the beginning of 1944.

The new Industrial Research Laboratory is situated in the compound of the Victoria Jubilee Technical Institute. The building has a floor area of 10,000 square feet and consists of main laboratory, special research laboratory, main industrial laboratory, grinding room, boiler room, stores, office and library. Sufficient accommodation would be available in these laboratories to carry out work on industrial problems up to pilot plant scale. At present some difficulty is experienced in getting additional equipment required.

Following is a brief account of the work done in the old and new laboratory during the year :—

(1) **Sulphur Dioxide and Sulphur from Gypsum.**—Experiments were carried out to find out optimum conditions to get a maximum percentage of sulphur dioxide from gypsum. The work is to be continued on a pilot plant scale as soon as sufficient facilities are available.

(2) **Concentration of Sodium Sulphide.**—A party manufacturing sodium sulphide experienced certain difficulties in getting high percentage of sodium sulphide in their fused mass. A number of experiments were carried out and the results obtained were communicated to the firm concerned.

(3) **Cashew Shell Oil.**—A certain party manufacturing cashew shell oil found that sometimes their oil did not satisfy the specification of their American buyers. After submitting their numerous samples to different analytical tests, methods were suggested to the party to improve the quality of the oil.

Experimental work for finding out the uses of cashew shell oil in the manufacture of certain utility products such as plastics, varnishes, etc., is in progress.

(4) **Dehydration of Castor Oil.**— Experiments to develop a suitable process for dehydration of Castor Oil have been continued with a view to study the effect, variation in operating conditions and the use of different catalysts on the quality of the product obtained.

(5) **Palma Rosa Oil.**—In continuation of the investigation undertaken by thi s Department, further work on the cultivation of Rosa Grass (Motia variety) was carried out during the year under report with the co-operation of the Silviculturist to the Government of Bombay. Grass was grown on a small plot of land in the Empress Gardens, Poona. The same was distilled and the quantitative yield of the oil determined. The yield of the oil on the weight of the grass was found to be rather low ; though the yield of the grass per acre was good. Two crops could be obtained. The weight of the second crop was less than half of the first crop. The percentage of the yield of oil on weight of the grass was the same namely 0·25 per cent. for the first and the second crops. The work is being continued and a grant has been received from the Board of Scientific and Industrial Research for this work.

(6) **Utility of Malvan Sand for the manufacture of Glass.**—A considerable deposit of a good quality sand stone was reported at Malond by the Mamlatdar of Malvan. In view of the shortage of good quality sand experienced by the Glass Factories in Bombay Province due to transport difficulties, examination of this sand-stone was undertaken to find out its suitability for the manufacture of glass. The sandstone was found to be suitable for the purpose and the parties interested were informed accordingly.

(7) **Decomposition of Soaps.**—Decomposition of soaps from different oils is being studied with a view to find out best conditions for the production of useful chemical products from the same. Castor oil soap has been taken first. It is the intention to try other soaps also.

(8) **Lead Plating on Iron Surfaces.**—A number of experiments were carried out to determine the optimum conditions for obtaining a good quality lead plating on mild steel surfaces, using lead fluoborate solutions prepared in the Laboratory. The work is being continued with the idea of preparing homogeneous lead lined equipment for chemical industries.

(9) **Manufacture of Ethyl Acetate.**—Ethyl acetate can be easily prepared from Acetic Acid and rectified spirit. Some difficulty is however experienced in removing the last five per cent. of water from ethyl acetate. Work on this problem is being continued.

(10) **Stabilisation of Hydrogen Peroxide.**—Experiments to improve the keeping qualities of hydrogen peroxide by addition of different stabilizers are in progress.

(11) **Manufacture of Beryllium Salts from Beryl.**—A party approached the Department with a request to give them workable methods for the extraction of Beryllium Oxide from its Ore (Beryl). Investigation was undertaken and is still in progress in connection with isolation of sufficiently pure Beryllium Oxide in maximum yield from ore.

(12) **Manufacture of Sodium Aluminate**.—Experiments are in progress in co-operation with a party to manufacture Sodium Aluminate from Bauxite, confirming to the standard specifications.

(13) **Glue from used up Picking Bands from Mills.**—Experiments are in progress to find out the best condition for extracting glue from waste pickers

from Textile Mills. Such factors as time and extent of liming PH and their effect on the yield and quality of glue are being studied.

(14) **A Issinglass from Fish Maw (sounds).**—A party approached the Department with a request for a suitable method for manufacturing issinglass from Fish Maws. Experiments are in progress in this connection.

(15) **Testing of the products of local industries for quality and issue of test certificates.**—During the year under report a large number of samples of soap and cashew shell oil were received for the issue of test certificates. Test certificates were also issued for samples of (*a*) Potassium Permanganate, (*b*) Lime, (*c*) Gypsum, (*d*) Crayon, (*e*) Tooth Powders, (*f*) Charcoal, (*g*) Starches, (*h*) Water Proof Papers, etc., received for the purpose.

Samples of Inks, Ink-powders, Gums, Lac and other stationery materials received by the Stores Purchasing Section were analysed and the test results communicated to the authority concerned.

(16) **Vegetable Oil Lamps.**—During the year under report the following three types of vegetable oil lamps were received for testing :—

(*i*) 'Ram Deepa' from Provincial Organiser, National War Front, Madras.

(*ii*) 'Sanj Wat' from Mr. Paranjape of Poona.

(*iii*) 'Magan Deep' from Registrar, Co-operative Societies and Director, Rural Development, Poona.

These were examined and tested for their burning performance and the test reports communicated to the parties concerned.

EXPERIMENTAL WORK ON RUBBER SUBSTITUTES.

6. **Premises.**—Premises of 4, Bombay Road, Poona 5, were found suitable for the Establishment and it has been taken on hire from March 1943, at the rate of Rs. 295 per month.

Setting up of Plant and Working Arrangement.

Experimental Factory.—

(*a*) **Sap Treatment.**—A separate Department for storage of sap from Euphorbia plants and its micro-biological treatment was set up. 25 teak wood containers of 140 lbs. capacity were constructed in such a way that the anærobic treatment of the sap could be carried out in it. A numerical system has been adopted making a perfect control possible regarding each and every single batch of sap from the time of reaching the Experimental Factory to the finished treatment.

(*b*) **Mastication.**—Thus the treated sap represents a coagulum which is being transferred to another place where the mastication, washing and rolling into sheets are taking place on the *Masticator* driven by 3 H.P. Motor.

(c) **Drying.**—A separate room equipped with suitable arrangement is used for drying sheets. It is also equipped with an *Exhauster* driven by 2 H.P. Motor. Humidity is controlled by *Hygrometer*.

Rubber Technological Department.—This had to be established for studying the behaviour of mixtures of different proportions of the substitute and natural rubber and this is provided with :—

(*a*) **Compounding room.**

(*b*) **Rubber Mill.**—It is driven by 5 H.P. Motor. A special hot water circulation arrangement is made for heating the rollers of the mill.

(*c*) **Vulcanising Press.**—Used to carry out Press-Curing in various moulds for making the test specimens. In order to have a perfect control over the temperature while curing, mercury plug with thermometer had to be fixed to the press and the temparature in the mould is controlled by thermocouple connected with Galvanometer.

(*d*) **Boiler Room.**—This is equipped with one *steam boiler* of a size which in accordance with the Boiler Act has to be supervised by a qualified person, and *an autoclave* for open curing.

. **Physical Test Laboratory.**—This is equipped with the following Test Apparatuses :—

(*a*) **Tensile Strength Testing Machine.**—This motor driven apparatus serves to estimate tensile strength and elongation at break of a ring shaped rubber specimen. It is provided with an *Automatic Recorder* which gives a graph of the stress-strain curve.

(*b*) **Hysteresis Test.**—By means of a certain adjustment, the same machine used for the estimation of hysteresis, which gives an additional information as to the wear and tear resistance of the specimen.

(*c*) **Compression Test Apparatus.**—This shows the compresibility of the specimen under load.

(*d*) **Abrasion Test Apparatus.**—This is used to estimate the abrasive wear of the specimen when in frictional contact with other material. It is driven by $1\frac{1}{2}$ H.P. Motor, and provided with a *revolution counter*.

(*e*) **Apparatus for the estimation of permanent set.**—It serves for studying the elastic behaviour and gives information regarding the progress of cure.

(*f*) **Hardness Test Apparatus.**—It records the brinell hardness number of the specimen.

(*g*) **Rebound Test Apparatus.**—It is for evaluating the resilience or energy restoration during recovery from elastic deformation. The rebound percentage is directly recorded.

(*h*) **Apparatus for estimation of Plasticity.**—It serves the control of processing operation on the mill.

(*i*) **Ring Punching Machine.**

(*j*) **Air Oven.**—It is electrically operated and serves for the estimation of *aging resistance* of the specimen.

The machinery and test apparatuses except the boiler and autoclave and air oven were constructed and manufactured in the Village Industries Experimental Workshop of this Department at Poona.

Research Laboratories—

(*a*) **Micro-biological Laboratory.**—There, all micro-biological processes are being watched over and controlled which have direct connection to the manufacture of Puranrub itself such as the studying of the micro-organism involved in Puranrub process and the development of their cultures, etc.

(*b*) **Chemical Laboratory.**—This serves for general research work as well as for analytical control of the materials involved in various processes, starting from Puranrub, crude rubber, fillers, chemical and by-products, etc., up to the actual vulcanised articles. The chemical testing of compounded rubber mixtures and

vulcanised specimens according to the British Standard Method is being carried out.

Practical works in connection with manufacture of Puranrub and experiments and tests regarding its utilisation—

(*a*) **Collection of Sap.**—Two centres at Vadki and Purandhar have been established for the collection of sap from the euphorbia plants. They have been organised by the Supervisor who has trained the employees on work in using the necessary accessories for tapping.

(*b*) **Utilisation of " Puranrub ".**—To get " Mix " and " Cure " for different rubber articles, various experiments were conducted with " Puranrub " and natural rubber of which the final results and test reports were submitted to the Controller of Rubber, New Delhi, through the Director of Industries.

(*c*) **Approval of " Puranrub " by the Rubber Controller.**—Various experiments with " Puranrub " were conducted also in the Dunlop Rubber Co., and the Indian Rubber Manufacturers Ltd., Calcutta, and based on their test reports, the Controller of Rubber, New Delhi, has finally approved " Puranrub " for the utilisation in the Rubber Industries.

CHAPTER III.

WORK OF THE DEPARTMENT FOR ORGANISED INDUSTRIES—contd.

STATE-AID TO INDUSTRIES.

7. Financial and other help is given by this Department under the following main heads—(*i*) Loans under State-aid to Industries Rules, 1935, (*ii*) Loans and Subsidies under the Loan-cum subsidy scheme for artisans, (*iii*) Grants and loans under a separate scheme for educated unemployed to start Small Scale Industries of their own, and (*iv*) Loans to Industrial Co-operative Associations.

(*i*) Loans granted under State-aid to Industries Rules, 1935.

8. With a view to widening the scope of the Rules, Government sanctioned certain amendments to the Rules during the year under review. The amended and revised rules are styled as State-aid to Industries Rules, 1935, and are printed in a leaflet form in all the regional languages of the Province. Under these rules, loans are granted to small industries and in particular to cottage industries for purpose of construction of buildings ; wells and other works necessary for industrial operations, for purchase and erection of machinery, plant and appliances and for the purchase of raw materials. The loans bear compound interest at $5\frac{1}{2}$ per cent. per annum and are repayable in instalments spread over a period not exceeding ten years.

Applications for loans for large industries are also considered on merits.

At the beginning of the year, a loan of Rs. 1,000 was sanctioned to a fisherman in Bombay for preparing and mending his nets for his fishing business on the basis of his industrial assets. As the party lost his boat worth Rs. 1,000 which was a part of the security for the loan the orders sanctioning the loan had to be cancelled.

Towards the close of the year, loans of Rs. 1,000 each were sanctioned to two parties in the Ratnagiri District to prepare rampan nets for their fishing industry.

(*ii*) Grant of Loans and Subsidies to Artisans.

9. The scheme for grant of loans and subsidies to artisans for purchase of appliances and tools and for providing them with working capital sanctioned in 1941 showed satisfactory progress during this year also. The scheme is intended for the benefit of the artisans who have been trained in the use of improved appliances in the technical and industrial schools and demonstrations under this Department, in the Reay Art Workshop in the Sir J. J. School of Art and in other approved institutions. An amount up to Rs. 500 is sanctioned for appliances and tools. Due to the abnormal rise in prices of raw materials required for running industries some of the artisans seeking help from this Department could not purchase their requirements of raw materials within the limit of Rs. 250. Government were pleased to raise this limit from Rs. 250 to a sum not exceeding Rs. 500 as working capital in any individual case, provided that, if the sum so sanctioned is for two or more persons for a joint undertaking, the total sum may be equal to what would have been admissible to each of them separately. Half of the amount sanctioned for appliances and tools is treated as subsidy while the remaining half together with the whole of the amount sanctioned for working capital is treated as a loan free of interest, repayable in monthly instalments spread over a period of not exceeding five years. Arrangements for supply of appliances and tools and raw materials to be purchased from the amounts sanctioned are also made by this Department.

During the year under review, loans and subsidies were sanctioned to 170 artisans. The total amount so sanctioned was Rs. 47,404. The statement below shows the number of artisans helped, industry by industry, and the amounts sanctioned for implements and for working capital :—

Industry.	Number of persons helped.	Amounts sanctioned for implements.	Amounts sanctioned for working capital.
		Rs.	Rs.
1. Coir and Fibre Work	8	2,649	592
2. Weaving	44	2,566	8,490
3. Glass Bangle Making	9	1,012	380
4. Art-crafts	5	2,400	1,000
5. Tanning	73	1,760	16,525
6. Leather	3	605	750
7. Cane and bamboo	12	1,600	1,600
8. Lacquer work	8	720	555
9. Fishery	1	500	200
10. Wool Weaving	1	50	200
11. Oil	2	....	750
12. Pottery	3	1,750	....
13. Carpentry	1	500	250
	170	16,112	31,292

(*iii*) LOAN AND GRANTS TO EDUCATED UNEMPLOYED TO START INDUSTRIES OF THEIR OWN.

10. The scheme for assistance to educated unemployed persons to set up in business or to start or develop industries of their own came into operation during the last year. Under the scheme loans and grants are to be made to (1) educated persons who have been trained in a particular industry to set up in that industry or in business or trade connected therewith, and (2) those already in business, industry or trade with a view to helping them to develop and expand their activities. Grants are given (*1*) for the purchase of tools, implements, and appliances or machinery, including the cost of erection, (2) for enabling the recipient to tide over the early stages of manufacture on a commercial scale, (3) for helping the recepient to meet losses due to poor production in the beginning, (4) for working capital in special cases and (5) for other similar purposes depending on the circumstances of each case. Applications from more than one person for a joint undertaking are also given consideration. The grant is not ordinarily to exceed Rs. 1,000 and in no case Rs. 2,000 without the special sanction of Government in the case of each individual provided that, if the sum so sanctioned is for two or more persons for a joint undertaking the total sum may be equal to what would have been admissible to each of them separately. Generally 50 per cent. of the grant is considered as a subsidy and 50 per cent. as a loan free of interest repayable in instalments. A grant on the basis of recovery of the whole of the grant or any percentage higher than 50 is also sanctioned in cases in which circumstances justify such a course. The repayment of the returnable part of the grant is spread over a period not exceeding five years in equal monthly instalments.

The grants sanctioned last year were utilised by all the grantees for the purpose for which they were sanctioned except one who refunded a part of the grant as the equipment required was not available at reasonable cost. During the year under review a number of applications were received for financial assistance under this scheme but only a few were found suitable. Loans were sanctioned to six persons. The total amount so sanctioned was Rs. 7,800 free of interest repayable by monthly instalments. No subsidy was sanctioned to any one during the year. The statement below shows the number of persons assisted under the scheme, industry by industry, and the amount of loan granted :—

Name of industry or business or trade connected therewith.	Number of persons assisted.	Amount sanctioned for equipment.	Amount sanctioned for working capital.	Total amount of grant.
		Rs.	Rs.	Rs.
1. Weaving	1	800	1,200	2,000
2. Manufacture of toys, chalk and hair oil ..	1	500	500	1,000
3. Manufacture of cotton covered and other insulating wires	1	600	600	1,200
4. Boot and shoe lace manufacture ..	1	400	600	1,000
5. Tanning	1	500	1,500	2,000
6. Hosiery manufacture	1	200	400	600
	6	3,000	4,800	7,800

(*iv*) LOANS TO INDUSTRIAL CO-OPERATIVE ASSOCIATIONS.

11. Out of the loan of Rs. 3,78,000 provided by the Government to finance the istrict Industrial Co-operative Associations to the extent of 1/5th of their working pital in the form of advances to each Association at the rate of Rs. 2,225 for each iit of 50 looms roped in for Supply Department work, the aggregate amount lvanced from the beginning up to the end of 31st March 1944 stood at Rs. 1,00,125. esides this, a loan of Rs. 5,000 was advanced to the Bagalkot Association for purchase food grains for handloom weavers working at the Association's Centres. The loan repayable by the Association when the work in connection with the Supply Department terminates.

CHAPTER IV.

WORK OF THE DEPARTMENT FOR ORGANISED INDUSTRIES—(*contd.*)

MINES AND MINERALS.

12. The annual returns of mines were collected by this Department from the District Magistrates of this Province and consolidated statements prepared and ibmitted to Government and to the Director, Geological Survey of India.

13. Numerous inquiries, chiefly on account of war, were received from the public, rovincial Governments and Indian States, and the Department of Supply for minerals, ieir sources of occurrence, firms mining them, dealers, etc. Information available ith the Department was readily supplied.

14. The Department assisted the Provincial Transport Board in making ecommendation for priority certificates for transport facilities for minerals required y various industries.

15. With a view to help the glass industry in this Province, the Honorary eologist to Government attached to this Department carried out preliminary ivestigations of reported sandstone deposits in Walawal area (Sawantwadi State). he material was tested in the laboratory and found useful. Lack of transport icilities however prevents exploitation of this source.

16. Recommendation was made to Government that within the period of five ears after the date of the conclusion of the present world hostilities, the Associated Cement Cos., Ltd., should erect a factory for cement manufacture in full production n execution of the mining lease granted to them in April 1941 for excavation of mestone in Tadkeshwar village, Surat District.

17. Almost all manganese mines in this Presidency have been exempted from working as there is no demand for the kind of ore found in these mines. The firms were llowed to renew the prospecting leases granted.

The chromite mine at Ratnagiri did not work during the year under report.

CHAPTER V.

WORK OF THE DEPARTMENT FOR ORGANISED INDUSTRIES—(*contd.*)

18. In this chapter information is given covering such forms of assistance as (a) solving of practical difficulties in processes of manufacture, (*b*) rendering of echnical advice in regard to estimates, machinery, etc., and (*c*) general assistance in ie matter of securing facilities and concessions to industries.

(a) Solving of practical difficulties in the process of manufacture.

(1) Getting satisfactory percentage yield of sodium sulphide for a manufacturing concern.

(2) Bringing the quality of cashew shell oil manufactured by a party to the required export specifications.

(b) Technical Advice rendered.

(1) Information to a party in connection with the manufacture of crayons from gypsum.

(2) Information as regards the preparation of Issinglass from Fish Maw.

(3) Information in connection with the manufacture of Beryllium Salts from Beryl.

(4) Manufacture of Sodium Aluminate of required specifications.

(5) A sample of Gypsum was received from the Conservator of Forests, Kolhapur. This was analysed and found to be suitable for manufacture of plaster of Paris.

(c) General assistance to industries.

(1) Applications received from several concerns for priority in the supply of materials and wagons for obtaining Rectified Spirit, Latex solutions, chemicals for manufacture of paper etc. were investigated and recommended to the appropriate authorities.

(2) A glass factory approached this Department for assistance in getting chemicals. This Department after inspection of the factory made recommendations for the release of necessary quantity of chemicals to proper authorities and for the release of sand to the Glass Technologist to Government, U. P. The application of the firm was favourably considered and production of glass bottles was commenced.

(3) Small transparent crystals of quartz are found near Gokak. These were obtained from the District Industrial Officer, Belgaum, and supplied to a party interested in using these for optical instruments.

(4) Many industrialists approached this Department to use its good offices in securing them transport priorities from the Board of Transport, Bombay. They were satisfied in the matter.

CHAPTER VI.

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES.

VILLAGE INDUSTRIES EXPERIMENTAL WORKSHOP, POONA.

19. The policy of this Department in connection with cottage industries is a comprehensive one. It covers—

(1) experimental work to devise improved processes, appliances, etc., (2) training of the artisans and others in the use of these, (3) grants of subsidies and loans to trained artisans, (4) marketing the products of the artisans and (5) organisation of the artisans in co-operative associations. The work of the Department in these

directions is described in this as well as chapters VII, VIII, IX, X, XII, XIII, XIV, XV and XVIII. The present chapter deals with experimental work in the interest of cottage industries conducted in the Village Industries Experimental Workshop, Poona.

20. The Village Industries Experimental Workshop, Poona, continued its activities in connection with designing, construction and testing of improved appliances and training artisans. A brief account of the work done is given in the following paragraphs :—

Designing, Construction and Testing of Improved Appliances.

21. The following appliances were designed and/or constructed during the year under review :—

(1) A hand-driven Raspador machine was constructed for extracting fibre and was under test and further improvement during the year.

(2) Equipment for the manufacture of lead pencils was designed during the year and experimental work was in progress at the close of the year for producing lead pencils of different types.

(3) Manufacture of slate pencils from slate powder which is generally wasted was under trial.

(4) Experiments were in progress for ascertaining the possibilities of manufacturing hollow ground razors from old files.

(5) Manufacture of rubber valve tubes and arrangements for seiving paper pulp by improved processes engaged the attention of the workshop during the year.

Manufacture of Improved Fitments for Supply to Departmental Institutions, etc.

22. With a view to economising in the cost of supplying improved fitments to the departmental institutions for their work and to the students trained in the various institutions, the following fitments were manufactured in the workshop :—

(1) Treadle-driven silk reeling machine with gorrated wheel to facilitate quick addition of new silk filament to the reeled thread eliminating the services of an assistant required for turning the machine was constructed and supplied to the Government Sericulture Farm, Hindalge, Belgaum.

(2) Different appliances required for cane and bamboo work in connection with the organisation of a new peripatetic cane and bamboo demonstration in Surat District were manufactured and supplied.

(3) Three sets of Lacquer Ware Tools were manufactured for a demonstration in Belgaum.

(4) Treadle Spinning Machine and Cord laying machine were prepared for coir work demonstration.

(5) Twenty-five wooden pestles were manufactured and six caps were fitted with new shafts for the improved oil ghany designed by the Department.

(6) Special Research work was to be conducted at Poona for a Rubber substitute. Different appliances and small machines required for various processes were constructed and tested and they were found to give useful service to the Research Officer in his experimental work.

Practical Field Tests.

23. During the year under review arrangements for the introduction of the improved type of ghani were continued. One ghani maintained at the Village Industries Experimental Workshop, Poona, was utilized in demonstrating its working and advantages over other ghanies to tellis and visitors to workshop. Under the present abnormal times arising out of war it was difficult to get certain parts for ghanis. Some devices were, therefore, tried. Ordinary C.I. rollers appeared suitable to replace ball-bearings used as thrust rollers on the pestle cap of the improved ghani. Further a $2\frac{1}{2}''$ gun metal Bush-bearing was tried to replace the two $2''$ ball bearing used on the ghani pestles. Experiments in this direction did not, however, lead to tangible results.

Ground-nut seeds thoroughly cleaned and their skin removed after frying were pressed in the improved ghani designed by this Department. The oil cake produced could be utilised with advantage by the Human Welfare Society, Poona, in preparing sweets and other recipes for consumption by people to supplement their food ration.

Trials with the decortication and pressing of Neem Seeds were conducted. The decorticated seeds can be pressed in the improved ghani and the oil obtained can be used for medicinal purposes and preparation of soap as well as lighting in villages for lamps.

Introduction of the improved ghanis amongst Tellis in different districts was continued. The Dhapuri Workshop supplied 23 ghanis to complete the order of 30 ghanis sanctioned in 1942-43. Turning of pestles, assembling of the equipment etc. were carried out at the Village Industries Experimental Workshop, Poona, before despatching the ghanis to tellis. Thirteen ghanis were installed during the year under review—one each at Nasik, Yeola, Nandgaon, Niphad, Wani, Nanashi and Sumar and six at Chandor. Three more were despatched and were awaiting installation at the close of the year. Work in this connection has not been speedy due mainly to the transport difficulties in war time. Since the inception of the scheme to the end of the year under review 26 ghanis as detailed below could be introduced :—

(1) **Belgaum District.**—One each at Athni, Gokak, Kudchi, Nandgad, Belgaum, Vantamuri and Chandgad **(7)**.

(2) **Satara District.**—One each at Warand, Sayagaon and three at Lonand (5).

(3) **Poona District.**—One at Baramati (1).

(4) **Nasik District.**—One each at Nasik, Yeola, Nandgaon, Nesbad, Warni, Naranhi, and Sinnar and six at Chandor (13).

Further introduction work is continued according as transport facilities are available.

Manufacture of further ghanis was in progress during the year in the Industrial Engineer's Workshop, Bombay, of this Department.

Training of Artisans.

24. (1) The training class in improved cottage glass and glass bangle work organised at the Village Industries Experimental Workshop in January 1941 continued during this year also. Eleven glass workers—8 from the Belgaum District and one each from the Bijapur, Surat and Nasik District were trained during the year in the methods of glass and glass bangle manufacture by modern methods and implements.

(2) The training class in working the improved oil ghani designed by this Department in July 1942, organised at the Village Industries Experimental Workshop, Poona, continued this year also. Eight tellis attended the class and received training.

CHAPTER VII.

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(*contd.*)

HAND WEAVING INDUSTRY.

25. The Department maintained 9 cotton weaving schools, one wool weaving school, six cotton weaving demonstrations, three wool weaving demonstrations and three dyeing and printing demonstrations for the benefit of the handloom weaving industry. A brief account of these peripatetic institutions is given below.

26. **Weaving Schools.**—All the nine schools worked satisfactorily in the different districts where they were located. They were able to introduce fly shuttle looms as detailed below :—

Division.	District.	Place.	Number of fly shuttle looms introduced.
Southern Division	Dharwar	Ranebennur	....
Do.	Do.	Hubli	10
Central Division	Nasik	Yeola	10
Do.	Ahmednagar	Pathardi	18
Do.	West Khandesh	Dhulia	8
Northern Division	Kaira	Ode	....
Do.	Do.	Valsan	....
Do.	Do.	Sunav	6
Do.	Surat	Anjlav	....
Do.	Thana	Bhivandi	....
Do.	Broach	Tralsa	4
Do.	Ahmedabad	Bavla	4

In addition 61 dobbies and six beams were introduced.

One school in Dharwar District and others in the Northern Division could not show better progress as on completion of their work at particular centres and in the absence of new students, attempts for their transfer to new centres did not meet with success on account of transport difficulties arising out of war.

27. **Wool Weaving School.**—This school has been working in Motebennur in the Dharwar District, a promising wool weaving centre, since November 1940. During the year under review a batch of ten students completed its training in May 1943 and a new batch was admitted in June 1943 which completed its training in November 1943. A further batch has been admitted which was under training at the close of the year. It is expected that the twenty students who completed their course would set up their own equipment in due course.

28. **Cotton Weaving Demonstrations.**—The six cotton weaving demonstrations worked at the different centres detailed below and introduced the number of fly-shuttle looms mentioned against each :—

Division.	District.	Place.	Number of fly-shuttle looms introduced.
Southern Division	.. Bijapur	.. Ilkal ..	20
Do.	.. Do.	.. Chadchan ..	9
Do.	.. Belgaum	.. Bail-hongal ..	5
Do.	.. Do.	.. Gokak ..	25
Central Division	.. Ahmednagar	.. Sangamner ..	4
Do.	.. Sholapur	.. Mohol ..	38

In addition 56 dobbies were also introduced by these demonstrations.

29. **Wool Weaving Demonstrations.**—(*a*) The demonstration working at Bijapur last year was continued at the same place during the year under report. Six students who were admitted in November 1942 completed their training in May 1943. Further seven students admitted in June 1943 completed their training in December 1943. A further batch of five students joined the demonstration of which three left the Institution before completing the course while the remaining two were under training at the close of the year.

The Collector of Bijapur as usual awarded scholarships to students attending the demonstration from the funds at his disposal.

The spinning class attached to the demonstration in charge of female staff was well attended by ladies anxious to learn wool carding and spinning. Twelve ladies were trained.

One loom and nine spinning wheels were introduced during the year.

(*b*) The Second Wool Weaving Demonstration continued to work at Aosari Budruk in Poona District. The services of the Demonstrator were, however, placed at the disposal of the Collector of Dharwar for some time. He trained there eight ladies in wool spinning. The Collector granted free to the trainees on completion of their training carding bows, spring wheels, etc., to enable them to work on their own after the training. The demonstrator was on leave for some time and as such no remarkable progress was made.

(c) The third Wool Weaving Demonstration engaged on war work having done its work was not continued at the place. The question of its transfer was under consideration but due to transport difficulties the same could not be carried through. Arrangements were, therefore, made to close the demonstration temporarily and to post the demonstrator at Bijapur to train wool weavers there.

30. **Dyeing Demonstrations.** —(*a*) One Dyeing Demonstration continued its work at Khasbag, Belgaum. Printing of yarn appeared to be in great demand. It was done by a number of weavers and dyers and the small yarn printing machine designed by this Department was being copied by some of them.

Forty-four weavers and fourteen dyers attended the demonstration in their spare time and received training in dyeing and printing. Thirteen persons from Ilkal, Guledgud, Hubli, Gadag, Karwar, Bailhongal, Sulebhavi and Satara attended the demonstration and received training in dyeing and printing.

As a result of the demonstration three new small dyehouses came into existence. Besides this Calico printing is started by three persons who are in a position to supply printed cloth.

The demonstrator also attended to the onerous duties arising out of the colour problems for supplying bandage cloth to Supply Department in particular shade through the different co-operative associations.

(*b*) The second dyeing demonstration continued its activities at Sholapur during this year also.

The demonstration as usual trained weavers and dyers in different processes. Six dyers, three printers, four weavers and eight others attended the demonstration regularly whereas eight dyers, four printers, two weavers and 20 others attended it casually to receive training and for solving their difficulties. People from Mohol and Valsang also came to the demonstration often for advice. One printing house was established with the help of the demonstration.

The demonstrator also conducted classes in dyeing and printing in the Government Power Loom Weaving Institute of this Department at Sholapur and assisted the cooperative association, Sholapur, in supplying bunting cloth of Standard shades as required by the Supply Department.

(*c*) The third dyeing demonstration worked at Modasa in the Ahmedabad District till August 1943 from where it was transferred to Bulsar in Surat District.

Modasa is a big business centre famous for dyeing with Alizerine red and Indigo blue, with a good number of dyers and printers. The dyers and printers here were initiated into modern processes of fast colour dyeing and printing and were also made acquainted with yarn printing on the machine designed by this Department. Two dyers, two printers and ten others regularly attended the demonstration whereas four dyers, three printers and thirty-six others attended casually the demonstration at Modasa. At Bulsar where the demonstration is still working two dyers, two printers, six weavers and eleven others attended regularly and one dyer, one printer, eight weavers and eleven others attended the demonstration casually during the period under review.

31. **Expenditure on peripatetic weaving and dyeing Institutions.**—Details of the income and expenditure of the peripatetic weaving and dyeing institutions will be found in Appendix A.

CHAPTER VIII.

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—*(contd.)*

TANNING DEMONSTRATION PARTIES.

32. The six Tanning Demonstration Parties of this Department continued to demonstrate the improved methods of curing, tanning, dyeing and finishing of hides and skins in the rural centres. These parties have visited two centres in each district of this province and are now taking a second round in each district introducing processes of mineral tanning and dyeing work and also manufacture of glue as far as it is possible in cottage industries.

These parties visited the following centres during the year under review. These centres were chosen in consultation with the Collector and Chairman, District Rural Development Board, of the district in each case :—

Centre.	District.	Duration of Demonstration.
(1) Bagalkot	Bijapur	27th July 1942 to 18th March 1944.
(2) Gokak	Belgaum	From 19th March 1944.
(3) Mahad	Kolaba	1st March 1942 to 24th April 1943.
(4) Alibag	Do.	26th April 1943 to 31st March 1944.
(5) Baramati	Poona	5th June 1942 to 21st October 1943.
(6) Laul	Sholapur	23rd October 1943 to 22nd March 1944.
(7) Vani	Nasik	17th October 1942 to 13th August 1943.
(8) Nandgaon	Do.	From 14th August 1943.
(9) Vapi	Surat	16th November 1942 to 6th August 1943.
(10) Lilapur	Do.	From 7th August 1943.
(11) Dholka	Ahmedabad	9th August 1942 to 26th June 1943.
(12) Dhanduka	Do.	From 28th May 1943.

(1) **Bagalkot, District Bijapur.**—All the local tanners and good number of people from neighbouring villages attended the demonstration and adopted new methods shown to them.

A set of tools worth Rs. 79 was given to the tanners for common use from grant-in-aid.

(2) **Gokak, District Belgaum.**—There are 18 families of Dhors in the village engaged in tanning business and all are showing keen interest to learn improved methods of tanning.

(3) **Mahad, District Kolaba.**—Ten students at the centre regularly attended the Tanning Demonstration School. As a result of the demonstration the output at the centre considerably increased in quality and quantity.

One setting out table worth Rs. 30 was given to tanners for their common use from grant-in-aid.

(4) **Alibag, District Kolaba.**—There are 20 Chamar families at the centre and 15 persons regularly attended the demonstration as a result of which lot of improvement in their product was marked.

(5) **Baramati, District Poona.**—This is a very big centre having 30 houses of Dhors who are engaged in tanning. Before the demonstration work the tanners were practising bag tanning by crude methods. They are now able to produce good sole leather B.T. chrome sheep and goat.

The manufacture of glue was demonstrated to the tanners successfully.

The Rural Development Board spent Rs. 600 for facilitating water supply to the centre.

A setting out table worth Rs. 30 was given to local tanners for their common use from grant-in-aid.

(6) **Laul, District Sholapur.**—17 students from the centre and some neighbouring village tanners attended the demonstiation. The party had to be shifted to Bombay before its work was over, due to plague epidemic there.

(7) **Vani, District Nasik.**—In the beginning five students attended the demonstration. The number rose to 20 at the end. The demonstration improved both the quantity and quality of leather produced.

(8) **Nandagaon, District Nasik.**—18 students attended the demonstration class as a result of which considerable improvement in tanning has been achieved in respect of finished products. In order to overcome water difficulties local tanners are trying to dig a well with the help of the Rural Development Board.

(9) **Vapi, District Surat.**—About 15 persons at the centre were trained by the Tanning Demonstration Party. The work at the centre has been quite successful and the output has considerably increased.

Tools worth Rs. 106 weie given to the local tanners for their common use from grant-in-aid.

(10) **Lilapur, District Surat.**—There are 27 families of Khalaps at the centre living on tanning business.

A batch of 20 students attended the demonstration class. As a result of demonstration the tanners have improved their product and are able to sell it at a comparatively higher price. The manufacture of glue was also demonstrated to the tanners.

Tools and equipment worth Rs. 135 were given to the local tanners for their common use from grant-in-aid.

(11) **Dholka, District Ahmedabad.**—Dholka is a very large tanning centre where there are 200 houses of village tanners but most of them were diverted to other trades. But now many of them have returned to their hereditary business owing to the successful demonstration and introduction of improved methods of various types of leather including dyed and finished.

(12) **Dhanduka, District Ahmedabad.**—As a result of demonstration the quality of leather produced now is far superior and the tanners do not find any difficulty in selling their goods. The manufacture of bag tanned sole was not known and this has been successfully introduced. The Rural Development Board sanctioned Rs. 300 for digging a well at the centre.

33. **Work at the Old Tanning Demonstration Centres.**—During the year under review, the Tanning demonstrators were asked to pay periodic visits to old demonstration centres to keep in touch with work done at the centres. The Tanning Expert also visited old centres when he was on tour in vicinity.

34. **Technical Advice and Help to the Trade.**—A number of tanners and people in the trade continued to seek the advice of the Tanning Expert of the Department as usual. A complete detailed scheme was worked out for a party for starting a bark tannery at Hubli. A scheme for starting a chrome and a bark tannery was supplied to Director of Industries, Sind, on his request.

35. **Tours.**—During the year under report, the Tanning Expert spent 48 days on tour to organise and inspect the work of Tanning Demonstration Parties and give technical advice where necessary.

36. **Expenditure.**—The total expenditure incurred during the year on the Tanning Demonstration Parties was Rs. 10,726-5-9 and receipts were Rs. 271-3-3 as detailed in Appendix B.

CHAPTER IX.

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(contd.)

SERICULTURE INDUSTRY.

37. **Gardening.**—All the available land was brought under partly high bush and partly bush cultivation. The usual operations e.g. manuring, weeding, watering, pruning etc. were carried out during the year. The required manure was secured from the Military Dairy Farm, Belgaum, and silt from river beds. Nearly an acre of land was newly planted and the growth of plants after pruning was found satisfactory. The garden, however, felt shortage of water after monsoon and had to be irrigated by drawing water from the Jail Pumping Station and the farm well.

38. **Rearing.**—The garden this time supplied very good leaves for rearing and as many as 180 broods were raised during the year. The rearings were carried on with various varieties of seeds mainly prepared at Belgaum and on two occasions from Mysore and Bengal species. Six hundred and thirty-four disease-free layings were reared during the period, utilising different cross and pure races and 354 lbs. 2¾ tolas of raw cocoons were obtained. The percentage of yield of the cocoons of pure race varied from 25·75 per cent. to 100 per cent. and that of cross breeds from 21·25 to 101·6. The average percentage of yield of cocoons came to 56 per cent. taking into consideration that 354 lbs. 2¾ tolas of raw cocoons were obtained with 364 layings.

Some of the cross breeds prepared had to be discontinued due to degeneration. The climatic conditions of the months during which rearings were conducted and the results of the rearings were regularly recorded at the farm.

39. **Reeling.**—As reported last year a silk reeler was appointed in January 1943 as a temporary measure who left for his place after training a couple of hands in reeling work. One of the operatives of the farm after such training attended to the reeling work during the year. The total quantity of cocoons reeled during the year was 105 lbs. and the silk obtained was 10 lbs. and 35¾ tolas. The silk obtained was found satisfactory.

The remaining cocoons will be reeled during the next year.

40. **Demonstration and Propaganda work.**—During the year the Sericulturist visited the neighbouring villages and Bagalkot, Chikkodi, Khanapur, Kangrali, Gokak, Konnur etc. to advise agriculturists to take up to sericulture as a subsidiary industry. Besides these several centres in Poona District having mulberry as wind break and live fence were visited. Some agriculturists who were anxious to have mulberry cultivation were supplied with mulberry cuttings free of cost from the farm garden.

Mr. R. T. Kamble of Bagalkot was trained in silk-worm rearing and reeling. Besides three students were under training in sericulture at the close of the year.

Some silk worm legature guts were prepared at the farm and sent to the Medical Department for test. The guts were found to be satisfactory for medical purposes.

CHAPTER X

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(contd.)

COTTAGE INDUSTRIES OTHER THAN HANDLOOM WEAVING, TANNING AND SERICULTURE.

41. The following cottage industries in addition to hand weaving, tanning and sericulture, were assisted by the Department by practical demonstration work etc., during the year :—

(1) Cane and Bamboo work.
(2) Lacquer work.
(3) Coir and Fibre Work.
(4) Art-crafts.
(5) Pottery Manufacture.
(6) Boot Lace and file strings making.
(7) Glass Bangle Manufacture.
(8) Lohar and Sutar Work.

42. **Cane and Bamboo work Demonstration.**—This demonstration continued its work at Belgaum. The 10 students admitted in March 1943 completed their course in September 1943. It was then transferred to Nandgod where it commenced its term in October 1943 and trained nine students by end of March 1944.

Expenditure.—The expenditure on and receipts from the demonstration were as detailed in Appendix C.

43. **Lacquer Work Demonstration.**—Two lacquer work demonstrations were conducted during the year.—

(1) One demonstration continued to work at Pen in Kolaba District where it was working last year. The batch of students admitted on 1st January 1943 completed its training in December 1943 and a fresh batch of six students was admitted which was under training at the close of the year.

(2) The second demonstration continued to work at Belgaum. Six students who were under training at the close of the last year completed their course in August 1943. A fresh batch was admitted in September 1943 which was under training at the close of the year and is expected to complete its course in August 1944.

Expenditure.—The expenditure on and receipts from the two lacquer work demonstrations were as detailed in Appendix D.

44. **Coir Manufacture and Soft and Hard Fibre Work.**—

(*a*) Coir Manufacture School.—This school was working at Aversa in the North Kanara District at the close of the last year with fifteen female trainees who completed their training during this year in May. The School was then transferred to Gangavali in the same District where it commenced its term in June 1943 with 15 trainees on roll. This batch completed its course in November 1943. The school was then transferred to Ankola in the same district where it started work in December 1943 with fifteen regular and 3 part time students who were expected to complete their course in May 1944.

Expenditure.—Expenditure and receipts from the schools during the year were as detailed in Appendix E.

(*b*) **Coir Rope and Brush Making Demonstration.**—This demonstration was working last year at Nagaon in Kolaba District with ten students on roll. These students completed their course in April 1943. The demonstration was then transferred to Alibag in the same district where it commenced work with 10 students on roll in May 1943. This batch of students completed training in November 1943. The demonstration was then transferred to Dhumachia Anjlav in the Surat District. Ten students commenced receiving training in January 1944 at this centre and they are expected to complete the course in June 1944.

Expenditure.—The expenditure and receipts from the demonstration during the year were as detailed in Appendix F.

(c) **Soft and Hard Fibre Demonstration.**—This demonstration was working at Kasba Sukene in the Nasik District at the close of the last year with ten students on the roll. This batch completed its course in September 1943. The demonstration was then transferred to Palkhed in the same district where it commenced work with ten students in November 1943 who are expected to complete their work in April 1944.

Expenditure.—The expenditure on and receipts from this demonstration during the year were as detailed in Appendix G.

45. **Scheme for the training of hereditary Art-Crafts works.**—During the year under report the ten scholars admitted to the Reay Art Industrial Workshop of the Sir J. J. School of Art, Bombay, in 1941-42, finished their training and returned to their places. The ten admitted in the year 1942-43 passed in the first year's examination and were promoted to final year course.

A new batch of the ten candidates was selected and admitted in June 1943. The number of students selected for the different crafts and the districts from where they hailed are given below :—

Number of students.	Crafts pursued.	Districts.
6	Wood carving ..	Dharwar (1) North Kanara (3) Surat (2)
1	Engraving ..	Nasik.
1	Embossing and Gold and Silver work.	Nasik.
1	Do. do.	Satara.
1	Do. do.	Belgaum.

These students are expected to complete their training in May 1945.

Since inception of the scheme in 1938-39 for training hereditary Art-craft workers at the Sir J. J. School of Art, Bombay, for two years course with scholarships of Rs. 30 per mensem each, 40 artisans have so far been trained in various crafts. It is gratifying to report that the majority of them are doing well. Four more past students received loans and subsidies during the year 1943-44 and all the students who have received financial aid up to this time except one are reported to be doing well and repaying the loan satisfactorily. The past trainees are arranging for direct marketing of their goods and some of them are regularly supplying artistic products to the Cottage and Small Scale Industries, Bombay, and the sales depots at Belgaum, Nasik and Surat of this Department. These articles have good demand.

The Part-time Artist Designer of this Department continued to assist the craftsmen in adopting new patterns and designs in their work and effect improvement both in the raw materials used and products turned out. The Crafts Supervisors especially the Supervisor interested in Wood Carving is paying more attention to the workmanship of the goods turned out by these artisans. As a result of the propaganda work done by the Artist Designer of this Department a Sandal-wood Producers' Society has come into existence at Sirsi. Thus there are three associations which are mainly concerned with the Sandal-wood Carving and Rose Wood Carving. These associations are the Kumpta Sandal-wood Carvers Association, the Honavar Sandal-wood Carvers' Association and the Sirsi Sandal-wood Producers' Society.

46. **Pottery Manufacture.**—The Pottery Demonstration organised at Manickpur, Bassein, in the Thana District continued its work there in training potters in the manufacture of different types of pottery wares by improved equipment, during the year under review. There was, however, a paucity of willing trainees coming forth to join the demonstration this year.

The demonstration in addition to its ordinarily training work also gave all possible co-operation to the Bassein Co-operative Pottery Glazed Ware Manufacturers' Producing Society Ltd.

The special wood fired furnace designed by this Department and erected at the demonstration was fired 22 times during the year—eleven biscuit goods firing and eleven glazed-wares firing.

Three bags of sayon clay were received for test as to the utility of the clay for pottery wares in February 1943. Experiments were conducted and the clay after different tests was found to be very useful for the manufacture of glazed wares.

The demonstration was visited by the members of the Ceramic Society of India at the time of their Annual Session in Bombay. They examined the improved equipment designed by the Department and the processes of manufacture and showed their entire satisfaction and keen appreciation of the work done for the training of village potters.

Mr. C. P. Shah, Honorary Consultant for Ceramics, paid several visits to the demonstration, supervised and guided its work and attended to various enquiries regarding pottery manufacture referred to him by this Department.

Expenditure.—The expenditure on and receipts from the demonstration were as detailed in Appendix H.

47. **Boot lace, File Strings, Bandings etc. Manufacture.**—This school was working at Nasik. On completion of its work there it was transferred to Satana in the Nasik District where it commenced its work from 1st October 1943. Six students joined the school and completed their training on 31st March 1944 in manufacture of *Punja* carpets, *galichas*, loom carpets, newars, and knitting of bandings. Two students also attended casually to learn the crafts.

Expenditure.—The expenditure and the receipts from the school were as detailed in Appendix I.

48. **Glass Bangle Manufacture.**—The Glass Chemist did regular touring and visited the centres where the improved glass furnaces, tools and equipment as designed by the Department were introduced and installed and gave necessary assistance to the artisans in their work.

Experimental test work on the utility of Silica sand from Bagewadi in Bijapur District and sands from the Gokak Taluka of Belgaum District was in progress at the close of the year.

A furnace was erected at Tarapur and different tools and equipment granted by the Department to loanees were installed at Kittur in Belgaum District, Kapadvanj in Kaira District and Gudur in Bijapur District.

Practical training in glass and glass bangle manufacture was given at the Village Industries Experimental Workshop, Poona. Eleven glass workers were trained—8 from Belgaum District, one from Bijapur, one from Surat and one from Nasik District.

49. **Lohar and Sutar Work.**—A new demonstration for training village Lohars (blacksmiths) and Sutars (carpenters) was organised for the first time by this Department in Belgaum. Due to the present abnormal times arising out of war the Department had to face considerable difficulties in obtaining the right type of equipment and staff. The demonstration could therefore be organised in January 1944 when a batch of students as provided in the scheme joined it with the benefit of scholarships of Rs. 20 per month to each for a course of four months. This batch was under training at the close of the year.

CHAPTER XI

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(contd).

MARKETING.

A.—Cotton Cloth.

50. The Government of India's grant received by this Province for the Marketing Scheme for Handloom Products was Rs. 44,350 for the year 1943-44. Some of the savings of the previous years were also utilized during the year and the total expenditure during the year amounted to Rs. 45,102.

51. **Number of District Industrial Associations.**—There were in all nine Industrial Co-operative Associations functioning in this Province at the following centres :—

(1) Ahmednagar,
(2) Hubli,
(3) Ahmedabad,
(4) Sholapur,
(5) Yeola,
(6) Malegaon,
(7) Kamatgi,
(8) Belgaum, and
(9) Dhulia.

52. **Working of the Associations.**—All the Associations mentioned above were in existence during the whole year. Out of these nine Associations eight were engaged on Supply Department's orders in Cotton Textiles. Full details of these will be found under paragraph 64 of this report. The following is a brief account of the progress of the different associations. For details a reference is invited to the Appendices J and K.

(1) **The North Central Divisional Industrial Co-operative Association Ltd., Ahmednagar.**—This Association progressed satisfactorily during the year. It concentrated its attention on war orders in cotton textiles in addition to its catering for civil requirements. The work of war orders was also entrusted by the Association to the Societies at Kharda, Pathardi and Vinchur which are affiliated to this Association. It also secured the orders of Tea-Tray cloth and Check Susi Cloth for Australia and Africa through the Government Sales Depot, Bombay. Recently it has increased its activities in connection with supplying dyed yarn to the weavers for the production of local type of goods. The Association effected sales to the extent of Rs. 477,035-4-11, and made a gross profit of Rs. 23,618.

(2) **The Southern Divisional Industrial Co-operative Association Ltd., Hubli.**—This Association did not progress as satisfactorily during the year under report as it did in the previous years. Attention of the Association is drawn to this lack of progress and it has been directed to improve matters. The loss of Rs. 39-15-9 sustained by the Association is due to its having concentrated its attention more on war orders.

(3) **The Northern Divisional Industrial Co-operative Association Ltd., Ahmedabad.**—This Association continued to concentrate its attention on the supply of goods to civil needs such as sarees, dhoties, towels, etc. as it did in last year. The Association effected the sales of Rs. 56,474-5-3 and earned a gross profit of Rs. 3,081-13-3.

(4) **The Sholapur District Industrial Co-operative Association Ltd., Sholapur.**—This Association progressed satisfactorily during the year under review. Although it sustained a loss of Rs. 4,032-15-1 it was due to the fact that the Association had to execute war orders accepted at lower rates and partly because of non-acceptance

of manufactured material by the Supply Department. During the year it erected its own building worth about Rs. 23,000 on the land given by Government free of cost, having an accommodation for its office and especially for its dyeing house. A new weavers' Co-operative Society at Karkhamb was affiliated to the Association.

(5) **The Industrial Co-operative Association Ltd., Yeola.**—This Association has shown a rapid progress towards the end of achieving the stage of self-sufficiency as will be seen from the figures of its sales turnover and gross profit. It has a largest membership of 796 members. It executed foreign orders for towels through the Government Sales Depot, Bombay, in addition to Supply Department's orders.

(6) **The Industrial Co-operative Association Ltd., Malegaon.**—This Association worked satisfactorily during the year under report. The results of the working of this Association showed a gross profit of Rs. 3,590-10-3.

(7) **The Bijapur District Industrial Co-operative Association Ltd., Kamatgi.**—The results of the working of this Association during the year showed a loss of Rs. 398-6-0. It has opened a Spinning centre with a view to provide work to the agriculturists by way of carding and spinning.

(8) **The Belgaum District Industrial Co-operative Association Ltd., Belgaum.**—The Association continued to work steadily. It effected sales of Rs. 20,337-3-11 and earned a gross profit of Rs. 2,008.

(9) **The Khandesh District Industrial Co-operative Association Ltd., Dhulia.**—This Association progressed steadily during the year under report. Its total sales amounted to Rs. 56,840-9-3.

53. **Results of the Year's working.**—In the beginning of the year the Associations were required to concentrate their attention on the execution of the orders from the Supply Department, Government of India, the detailed reference to which is made in the following section of the 'Manufacture and supply of handloom textiles to the Supply Department'. The statements of membership, capital turnover and gross profit of each Association for the years 1942-43 and 1943-44 are given in the Appendices 'J' and 'K'. The total sales effected by all the Associations amounted to Rs. 22,20,005-3-½. All the Associations have been taking advantage of Sales Depots started at Bombay, Surat, Nasik and Belgaum and from experience it is found that a good demand has been created at all the centres for the goods of these Associations.

B.—Woollen Cloth and Yarn.

54. **The Government of India Grant.**—The Government of India's grant received by this Province for the Scheme for the development of cottage and small-scale woollen industry was Rs. 17,000 for 1943-44. The actual expenditure incurred on the scheme during the year under review amounted to Rs. 13,658-13-6.

55. **Working of the Scheme.**—The work of the Scheme was carried out on the same lines as in the previous years through the agency of the Industrial Co-operative Associations organised by this Department at Ahmednagar and Hubli under the scheme for marketing of Cotton handloom products, financed from the Government of India grant and the third at Ranibennur organised from the savings effected in the grants of Government of India in the year 1941-42. Out of the total grants under the Wool Scheme sanctioned by the Government of India to these Associations the actual expenditure incurred by the Ahmednagar Association was Rs. 2,031-15-0, by the Hubli Association was Rs. 3,303-1-6, and that by the Ranibennur Association was Rs. 656, the total expenditure incurred by these Associations was, therefore, Rs. 5,991-0-6.

56. **Working of the District Industrial Associations and Producers' Societies.**—

(1) **The N. C. D. Industrial Co-operative Association Ltd., Ahmednagar.**—During the year under report the Association had supplied blankets to Indian Stores Department, Yeravda Central Prison, Visapore Temporary Prison, Government Sales Depot, Nasik, and other woollen materials to some merchants of Poona, Bombay and Panipat, as detailed below :—

Consignees.	Amount.		
	Rs.	a.	p.
1. C. O. D., Cawnpore	1,400	0	0
2. Superintendent, Yeravda Central Prison	2,100	0	0
3. Superintendent, Visapore Temporary Prison	6,251	0	0
4. Sales Depot, Nasik	1,019	0	0
5. Merchants	2,009	8	0
6. Other Miscellaneous Sales	3,820	15	0
	16,600	7	0

During the year under report 26,985 lbs. of handspun woollen yarn worth Rs. 23,918 was supplied to the Yeravda Central Prison, Nasik Central Prison and Ahmedabad Central Prison. Woollen yarn worth Rs. 711 was also supplied to other parties of the Province.

The Association after execution of previous orders for army blankets could not obtain any further orders for blankets from the Supply Department against their revised specification which came into force from 1st April 1943. The Supply Department remarked that the local wool used for the manufacture of these blankets was coarse and of poor quality and was unsuitable for the defence services, and insisted on manufacture of blankets by obtaining wool from Messrs. Bangalore Cotton-Silk Woollen Mills, Bangalore. Owing to transport and other difficulties and also for the price offered by the Supply Department the Association did not accept any further order for army blankets, since 1st April 1943.

(2) **The S. D. Industrial Co-operative Association Ltd., Hubli.**—The Association has its woollen branch at Bijapur and produced army blankets, bazar type coarse and fine kamblies, scrapes, felt etc. etc. during the year under report. The Association secured order from the Supply Department for 3,000 barrack blankets during the year and supplied 335 pieces against the above order, and the remaining pieces were rejected by the Stores Department for coarse and poor quality of local wool used. The Supply Department also insisted on this Association's manufacturing barrack blankets out of Bangalore wool, but the latter did not accept any order due to transport and other various difficulties.

The Association is now producing Kambals, lohis, coatings etc. for civil requirements. All types of woollen goods manufactured by the Bijapur District Wool Producers' Society, the Kurbal Wool Developing Industrial Association, Ranibennur and the Konnur Wool Producers' Society were also supplied to Hubli Association for disposal. The following are the sales and purchases during the year :—

	Rs.
1. Purchase of finished goods	19,645
2. Sales of finished goods	15,512
3. Purchase of raw materials	12,703
4. Sales of raw materials	9,516

During the year under review the goods of the Association were sent to the Sales Depot at Dharwar, Belgaum, Bombay, and also outside the province such as

Jamshedpore, Gaya, etc. for sale. The Association has also received orders from Bihar but unfortunately it is not able to make any business with other Provinces for restriction of booking.

Some of the goods were also exhibited in the Agricultural and Industrial exhibition at Devihosur (Dharwar) and Athani (Belgaum) and obtained silver medals for quality of its products.

57. **Dyeing and Finishing plant at Ahmednagar and Hubli.**—In the absence of orders from the Supply Department for barrack blankets the finishing plants could not be fully kept engaged during the year. As the Ahmednagar Association has arranged to mill and raise blankets by hand process at the rate of 150 pieces per day, it has returned the raising machine to Messrs. Raymond Woollen Mills, Bombay, from whom it was taken on hire.

C.—Sales Depots.

(i) Bombay Depot.

58. During the fourth year of its existence, the Depot showed an all-round expansion of its activities. The Depot continued to be housed on the ground floor of the Great Social Building at Sir Pherozshah Mehta Road.

The Depot as usual received goods on consignment basis from the District Industrial Co-operative Associations, peripatetic weaving schools, lacquer-work demonstration, coir demonstration, the Sisal Fibre Institute (Ahmednagar), and the Honawar and Kumta Sandalwood Producers' Co-operative Associations. It also marketed goods of individual artisans and small-scale producers on a commission basis.

The total sales and deliveries during 1943-44 amounted to Rs. 6,16,464-8-3 against Rs. 1,95,912-13-11 in the previous year. The stock on hand on 31st March 1944 was worth Rs. 91,686-4-2. The gross profit during the year was Rs. 71,940-11-5.

During the year the Depot received substantial orders from Australia. In addition to the order of towels and tea-tray cloth the depot also received orders for new varieties such as table cloths, curtains etc.

The Depot continued to introduce new artistic designs and patterns in Sandalwood and Copper Metal and clay articles, and helped many of the ex-students of Reay Art Workshop by placing orders with them.

(ii) District Sales Depot of Cottage and Small-Scale Industries, Belgaum.

59. The Sales Depot has completed its second year of existence showing very good progress in its activities and increase in sales. The daily average sales ranged from Rs. 150 to Rs. 200. The monthly average sales worked out to Rs. 4,900. The loanees in this District have been connected with the Depot for marketing their products. Goods manufactured by the Weavers' Societies and industrial institutions of this District were also regularly in the Depot for sale. The Depot has enabled the artisans to find a ready market for their goods without the middleman's profit. Many important official and non-official visitors, who paid a visit to the Depot, expressed their satisfaction on the useful and good services rendered to the artisans and customers through the Depot. The following statement shows the details about the total expenditure, sales, gross earnings and purchases made during the year 1943-44 :—

	Rs.	a.	p.
(a) Total purchases made during the year 1943-44 ..	58,319	2	4
(b) Total sales during the year	59,140	14	9
(c) Total expenditure of the Depot including rent, salary and other contingencies	3,999	10	9

The above figures show that the Sales Depot, though in its initial stages, has been in a position to maintain and meet its own expenses. It is a matter of great satisfaction that this Depot is getting popular on this side, particularly amongst ladies and educated classes. Attempts are also now being made to link up many young and enthusiastic ladies who are willing to work during their leisure hours as pastime for marketing any of their handicrafts with the Sales Depot.

(iii) The District Sales Depot, Nasik.

60. The Depot completed full one year and at the beginning for nearly one month it had spectacular sales. Artisans in all lines were encouraged, organised and provided with work. The weavers of Sinnar, Khed and Satara, the carpenters of Nasik, the leather workers of Bhagur and Nandgaon and the wool weavers of Naigaum executed some of the orders. In order to estimate the demand and to prove the utility of the Depot to villagers the Depot gave suitable material to five co-operative credit societies on deposit and consignment basis. The working of the Depot successfully provided material to schools, hospitals and local Government Departments. The Depot suffered a loss of Rs. 2,483-13-9 due to fire in the show room which took place in August 1943.

On account of the cloth control order the prices of textiles in the market came down suddenly. This affected the sales of the Depot to a great extent. Although there is profit on the whole yearly working of the Depot, the latter half yearly statement shows loss on account of reduced sales. New sources for increased sales are being tapped and a small attempt in this direction showed favourable results.

The Depot exhibits mainly all kinds of textile materials of modern utility pattern. The stocks include varieties usually required by the citizens, villagers and also the backward area people, such as woollen and silk fabrics, leather goods, metal ware, fibre goods and artistic articles of sandal wood, ivory and potteries.

The Depot sold standard cloth on behalf of the National War Front, Nasik, who in initial stages have taken control of distribution.

In order to popularise the standard cloth sarees, 400 pieces were obtained dyed in popular shades from a small dyeing factory at Malegaon. The result has been so satisfactory that the factories at Dhulia and Malegaon received large orders for dyeing standard cloth sarees in those shades.

The following statement shows the details about the total expenditure, sales, gross earnings and purchases made during the year 1943-44.

	Rs.	a.	p.
(*a*) Total purchases made during the year 1943-44 ..	86,486	4	3
(*b*) Total sales during the year	94,002	4	9
(*c*) Total expenditure of the Depot including rent, salary and other contingencies	5,726	15	9

(iv) District Sales Depot of Cottage and Small-Scale Industries, Surat.

61. A good many small-scale and cottage manufacturers are taking advantage of the marketing facilities offered at the District Sales Depot, Surat, and goods of a number of artisans of the district who were too poor to keep their goods on consignment account were purchased outright by the District Sales Depot. Loanees of the Department are also taking advantages of the District Sales Depot by keeping their

goods on consignment account. A number of past students of the Leather Working School were helped in marketing their finished products. Many local sandalwood carvers were assisted in selling their finished products through the District Sales Depot.

The following statement shows the details about the total expenditure, sales, gross earnings and purchases made during the year 1943-44—

	Rs.	a.	p.
(*a*) Total purchases made during the year 1943-44 ..	41,934	4	6
(*b*) Total sales during the year	36,701	6	0
(*c*) Total expenditure of the Depot including rent, salary and other contingencies.	6,617	11	7

CHAPTER XII

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(contd.)

SCHEME FOR THE USE OF THE COTTAGE AND SMALL-SCALE INDUSTRIES FOR THE PRODUCTION OF WAR SUPPLIES.

(1) Handloom Cotton Textiles.

62. During the year under report, Government sanctioned the opening of Government Manufacturing Centres in the distressed areas of Bijapur and Dharwar Districts in addition to those of Government and Industrial Co-operative Associations started in the previous year, with a view to providing work to the Weavers as one of the relief measures taken in these famine and scarcity areas, as also for prompt execution of the Supply Department orders in textiles, and increased the amount placed at my disposal to make purchases of yarn and chemicals required by the Industrial Associations and Official centres for Supply Department work from Rs. 10,00,000 to Rs. 13,00,000. Two Government Centres were accordingly opened, one at Nidgundi in Bijapur District and another at Gadag in Dharwar District under the management of experienced Production Managers who worked under the guidance and supervision of the Textile Expert and Designer of this Department. However, out of the 7 Government Cloth Supplying Centres thus working in the various districts during the year two old Centres had to be closed down subsequently, namely one at Sangamner in Ahmednagar District from 1st November 1943 and another at Savda in the East Khandesh District from 1st December 1943, owing to the weavers of these places being disinclined to take up the work of manufacturing handloom textiles against Supply Department orders on the ground of comparatively low wages offered to them against local demands.

63. During the year this Department was also entrusted by Government with the manufacture and supply of 70,000 pieces of Standard Sarees in connection with the Government of India Scheme of distribution of Standard Cloth for civil requirements in different Provinces. The order was distributed to the Industrial Co-operative Associations and Official Centres for compliance according to the requirements of particular Districts. After manufacturing about 5,000 pieces of Sarees, Government orders were received to stop further manufacture as there was no demand for Standard Cloth from the general public.

64. The following orders for the various types of cloth worth about Rs. 2,35,134-4-8 were secured from the Supply Department during the year under report and were distributed to the Associations and Official Centres for execution according to their capacity :—

Type of cloth	Yardage		Value Rs.	a.	p.
(1) China Sheeting ..	.. 4,00,000	Yds.	54,947	14	8
(2) Mazri light ..	.. 1,00,000	,,	10,703	2	0
(3) Tape Cotton Plain 1"	.. 3,750	Rolls, each roll being of 100 yds.	18,774	0	0
(4) Dungree Blue 36" wide	.. 12,000	Yds.	8,875	0	0
(5) Dosuti Dusters ..	.. 22,000	Dozs.	96,597	11	0
(6) Bunting cloth in various colours.	58,014	Yds.	43,537	5	6
(7) Cleaning cloth ..	.. 1,250	Dozs.	1,699	3	6
		Total value ..	2,35,134	4	8

Against the above orders together with some of the balance of order from the previous year mentioned in the last year's report the supply of material of the total value of Rs. 5,53,846-6-4 was completed as detailed in the statement below :—

Type of cloth	Order completed		Value Rs.	a.	p.
(1) Dungree Blue ..	.. 1,08,970	Yds.	52,589	6	7
(2) Dosuti grey ..	.. 2,00,670	,,	88,105	15	0
(3) Bandage cloth ..	.. 20,000	,,	4,791	11	0
(4) Tape Cotton Plain 1"	.. 3,750	Rolls	18,774	0	0
(5) Bunting cloth ..	.. 2,65,766	Yds	133,171	2	1
(6) Hand Huckaback Towels	.. 2,13,660	Nos.	155,623	0	0
(7) Dosuti Dusters ..	.. 20,458⅔	Dozs.	48,495	8	0
(8) Grey China Sheeting..	.. 1,04,760	Yds.	45,769	7	8
(9) Handkerchiefs ..	.. 30,459	pieces.	6,546	4	0
		Total ..	5,53,846	6	4

For the completion of the above orders the Associations and Official Centres had put on about 3,200 looms together, and they were supplied with raw material for manufacturing the fabrics to the extent of Rs. 6,07,329-14-11 during the year.

(2) **Miscellaneous.**

65. The scheme for the use of Small Scale Industry for the production of War Supplies was continued during the year under review. Orders received in the previous year for tent iron pins small, bullock carts, axes hand helves, shovels G. S. M. K. 111 helves, faucet bodies and caps, gloves M. T., hawl handles large, helves 4½ and 6½ lbs. and iron dog-spickes which were under progress in the last year were completed during the year under report.

New orders were received for (*a*) one lakh small wooden tent I. P. pins worth Rs. 1,725 ; (*b*) Sixty thousand pick-axe of helves of 4½ lbs. worth Rs. 45,000 ;

(c) Five thousand three hundred Ash-helves of different types worth Rs. 1,230; and (d) One thousand five hundred Folding Charpoys for Military Hospitals worth Rs. 25,500.

Articles under (b) and (d) above, viz., pick-axe helves and Folding Charpoys were delivered during the year whereas those under (a) and (c) above, were being manufactured at the close of the year and partly delivered.

CHAPTER XIII.

WORK FOR COTTAGE INDUSTRIES—(contd.)

GRANTS-IN-AID TO PRIVATE BODIES FOR THE DEVELOPMENT OF COTTAGE INDUSTRIES.

66. During the year grants-in-aid were made by Government to the All-India Village Industries Association and the Sisal Fibre Institute, Ahmednagar. A brief review of the work done by these bodies is given below :—

(I) **The All-India Village Industries Association.**—The work as in the previous years is divided under the following heads :—

1. Coir Section.
2. Button Section.
3. Horn Section.
4. Office Section (Miscellaneous work).

In the first three sections the work was carried on as on last year's lines.

Coir Section.

Coir Spinning.—Coir spinning was the most important branch of the activities of this section. The high prices for coir yarns which prevailed in the market gave very great encouragement to this industry. The war industries continue to attract our villagers ; they get very high wages—disproportionate to the work turned out by them. The most important is the manufacture of Charcoal. But for this, the success of this industry would have been even more marked. 38 women received training in Coir Spinning.

Rope making.—This industry too was very popular. The machines of the type used in the school were got made for private persons in two villages and are in use there. It is hoped that these instances will become catching and other villages will follow them ; 6 persons were trained for this industry.

Weaving.—The prices of colours have become prohibitive, hence the weaving of mattings has been stopped altogether. The weaving of mats is however done on a small scale. Instruction was imparted to four persons.

Rs. 3,000 were sanctioned for this section. Rs. 2,994-5-2 were spent. The value of articles manufactured was Rs. 460. Out of this Rs. 290 were recovered. In all 38 women and 10 men received training. Scholarships paid amounted to Rs. 333-11-8. Rs. 550 worth of cocoanut husks were purchased. They are in the course of retting.

Button Section.

The work was continued on the same lines as in the last year, but on a more extensive scale. Training institutions were opened at Kasarkod, Hosad and Gundabale villages of Honavar taluka. In all 40 persons were trained. No scholarships were paid, but the trainees were permitted to take away the articles made by them.

Rs. 450 were provided for ; Rs. 449-10-6 were spent. No sale proceeds are to be returned to Government. Of the persons trained, 24 were of Honavar Taluka, and 10 were from the other talukas of Kanara district and 6 from other districts.

Horn Section.

This Section too was very popular. Combs and hair-pins were articles in the manufacture of which people in large numbers came forward to receive training. No Scholarships were paid. As in the case of button section, the trainees were permitted to take away the articles made by them. Rs. 450 were provided for ; Rs. 446-1-0 were spent. No sale proceeds are to be returned to Government. 40 were trained for this industry. Of them 24 were of Honavar taluka, 10 of other talukas of Kanara district and 6 of other districts.

(ii) **Sisal Fibre Institute, Ahmednagar.**—This Institute run by the American Marathi Mission, Ahmednagar, was given a recurring grant of Rs. 4,106 during the year under review on the condition that it admits each term at least fifteen apprentices to be selected by a Selection Committee proposed by the Department.

The Institute provides training in sandal making *bondrie* or coarse bag making, carpet and doormat weaving, rope making, manufacture of fancy braided articles, brushes, etc., etc., from sisal or aloe fibres.

During the first term of the Institute, June 15th to November 14th, 1943, thirteen apprentices joined the Institute of whom eight completed the prescribed course. During the second term commencing from 15th November 1943 sixteen apprentices joined the Institute. Two special candidates were also admitted. Thus a total number of 31 apprentices got admission to the Institute during the year of whom 19 hailed from Ahmednagar District, four were from Satara, 5 from West Khandesh, one from Sholapur, one from Thana and one from Bombay.

(iii) **Poona Paper Research Centre.**—The Paper Research Centre at Poona which is conducted by the All-India Village Industries Association received its recurring and non-recurring grants as usual during the year under report. The Centre carried on experimental work in connection with the manufacture of handmade paper from waste paper and celluloid fibre. It also manufactured blotting paper and filter paper. The Centre also organised training classes for training men in the art of manufacture of hand-made paper. The Centre incurred an expenditure of Rs. 11,100. The centre has been taken over by Government from 1st April 1944 from the Association.

CHAPTER XIV

WORK OF THE DEPARTMENT FOR COTTAGE INDUSTRIES—(contd.)

WORK OF THE DISTRICT INDUSTRIAL OFFICERS.

67. A brief account of the work done by the three District Industrial Officers at Belgaum, Nasik and Surat during the year is given in the subsequent paragraphs:

District Industrial Officer, Belgaum.

68. **Departmental Institutions in the District.**—General periodical supervision of the following departmental institutions was made during the year under review :—

(1) District Sales Depot of Cottage and Small Scale Industries, Khadebazar, Belgaum.

(2) Government Lohar's and Sutar's Demonstration, Belgaum.

(3) Government Lacquer Work Demonstration, Belgaum.
(4) Government Cane and Bamboo Work Demonstration, Nandgad.
(5) Office of the Weights and Measures Inspector, Belgaum Division, Belgaum.
(6) Office of the Weights and Measures Inspector, Athani Division, Athani.
(7) Office of the Weights and Measures Inspector, Gokak Division, Gokak.
(8) Government Weaving Demonstration, Bailhongal.
(9) Government Weaving Demonstration, Gokak.
(10) Government Dyeing Demonstration, Khasbaug, Belgaum.

69. **Loans and Subsidies to Artisans.**—During the year under review 29 applicants were given loans as shown below :—

Weavers	..	..	..	..	19
Bangle makers	..	..	..	..	3
Cane workers	..	..	..	..	6
Teli	..	..	..	..	1

The above grantees have been granted loans and subsidies amounting to Rs. 5,808-0-0. The disbursement of the amount was taken up and the grantees were supplied with necessary equipment and raw materials by this office.

There are 64 loanees under this office at the end of the year. Total amount disbursed to these loanees amounted to Rs. 12,410-0-0.

Monthly loan instalments from all these loanees were collected and the amount was credited into the Government treasury from time to time. The total recoveries through this office during the year amounted to Rs. 1,947-8-0. Every possible help was given, and arrangements were made to get the instalments on due dates. Two loanees were found to be always in arrears. These grantees were given enough work through the District Sales Depot, Belgaum. At the end of the year many handloom weavers had enough work and good profits for their labour. Technical as well as other difficulties were solved and close touch was maintained by this office. On the whole, this scheme is working well in this District and good number of artisans are benefited.

70. **Loans to Educated Unemployed.**—A confectionary factory in Belgaum has been granted a loan of Rs. 1,000 by this Department under the above scheme during last year. Periodical visits were paid to this factory and reports were obtained from the party. The factory is making good progress and the last year ending report shows good sales and profit. This party has been given a special quota of sugar for the manufacture of lozenges, peppermints, etc.

A mechanical workshop at Sirsi in Kanara District has been given a loan of Rs. 1,000 by this Department for the development of its furniture industry during last year. Sirsi was visited and the work of the grantees was seen personally, and necessary help for getting the supply of wood from the Forest Department was given.

71. **Grants under Producer Gas Plants' Scheme.**—Four parties have been advanced loan for purchasing producer gas plants for their motor vehicles. These parties are from four different places of this district, as per details given below :—

Place	Taluka		No. of persons	Amount advanced Rs.	a.	p.
Belgaum	Belgaum	..	1	1,255	0	0
Yamakanmardi	Hukkeri	..	1	1,500	0	0
Nippani	Chikkodi	..	1	1,500	0	0
Athani	Athani	..	1	1,550	0	0
	Total	..	4	5,805	0	0

Instalments were recovered every month from the above parties and the amount was credited into the treasury.

72. **Haskell Oil Ghany.**—These ghanies are given to hereditary Telis on loan-cum-subsidy basis. The loan amount is to be paid in monthly instalments of Rs. 5 There were already the following installations in this District during the last year—

(1) Gokak, (2) Athani, (3) Kudchi, (4) Nandgad and (5) Belgaum.

During the year under review, 2 more units were installed one at Wantmuri and the other at Chandgad. Rs. 245 were collected from all these centres in monthly instalments. Complete recoveries in respect of Athani and Gokak ghanies were made and these ghanies were restored to their owners.

Periodical visits were paid to the premises where these ghanies are installed and reports submitted to the Director as well as to the Assistant Engineer, Village Oil Industry, Poona. Every possible assistance was given. Belgaum Teli was connected to the District Co-operative Stores, Belgaum, for marketing of his oil. A loan of Rs. 250 was made available under "Loans and Subsidies to Artisans" scheme to a Teli at Kudchi.

73. **Industrial Training Classes.**—During the year under review, young, energetic and intelligent boys (Craftsmer) were sent for training in various Departmental Demonstrations and training institutions, with the benefit of Departmental scholarships, and in certain cases, Rural Development Board scholarships too as supplementary grant. Following are some of the details.

Glass Bangle Training.—Four boys were sent for training at the Glass Bangle Training Class at the Village Industries Experimental Workshop, Poona.

Power Loom Institute, Sholapur.—One boy was sent.

Pottery Demonstration, Bassein.—Two boys were sent.

Haskell Oil Ghany class.—One Teli was sent at the Haskell Oil ghany training class at the Village Industries Experimental Workshop, Poona.

Wool Weaving School, Motibennur.—Two boys were sent.

74. **Rural Development Scholarships.**—Rural Development Board Scholarships and grants were made available for boys from this district as supplementary help to meet the necessary expenses while under training. Arrangements were made for scholarships for boys who took training in following lines.

Glass Bangle making.—Two scholarships worth Rs. 150 were granted to two boys who were under training at the close of the year and who would be completing their course by the end of June 1944, in the Glass Bangle Training Class at the Village Industrial Experimental Workshop, Poona.

Pottery Work.—Two scholarships worth Rs. 80 were granted to two boys who took their training in the Government Pottery Work Demonstration, Bassein.

Cane and Bamboo Work.—Four scholarships worth Rs. 120 were granted to 4 boys who took training in the Government Cane and Bamboo Work Demonstration when it was at Nandgad in Khanapur taluka of this District.

Lacquer Work.—Four scholarships worth Rs. 240 were granted to four boys who were under training in the Government Lacquer Work Demonstration, Belgaum, at the close of the year.

Wool Weaving.—Two scholarships worth Rs. 140 were granted to two boys who were under training in the Government Wool Weaving School, Motibennur, Dharwar District, at the close of the year. Rs. 300 have also been sanctioned for supplying tools, etc., after training of these boys.

75. **War Supply Works.**—An order of 4,000 Helves was placed with one contractor at Chandgad, in Chandgad Mahal of this district by the Director of Industries. His work was supervised from time to time and every help was given to him. Manufacturing work of these 4,000 Helves was completed at the close of the year. Some other contractors at Belgaum were also given orders for Helves. Their work was also supervised and all possible help was rendered to them.

76. **Work with regard to controlled commodities.**—Applications from Industrial Establishments for supply of various controlled commodities like kerosene, sugar, crude oil and cement were forwarded by the District Magistrate, Belgaum, to this office for due scrutiny and remarks. This office began to receive such applications from the month of May 1943. Since then nearly 70 applications were forwarded by the District Magistrate to this office and they were as under :—

Kerosene supply	58 applications.
Sugar supply	8 ,,
Crude oil supply	3 ,,
Cement supply	1 application.

Personal visits were paid by the Officer to the premises of the factories of these applicants, and reports submitted to the District Magistrate, Belgaum.

77. **Trade Enquiries.**—Various types of written and oral inquiries were received in this office and were successfully attended to.

78. **Artisan Societies.**—At the beginning of the year, there were the following weavers societies in this District :—

(1) Belgaum	Weavers'	Co-operative	Society,	Belgaum.
(2) Kittur	,,	,,	,,	Kittur.
(3) Gokak	,,	,,	,,	Gokak
(4) Bailhongal	,,	,,	,,	Bailhongal.
(5) Yamakanmardi	,,	,,	,,	Yamakanmardi.
(6) Chikodi	,,	,,	,,	Chikodi.

During the year under review, four more societies were organised. These were :

(7)	Weavers'	Co-operative	Society,	Wakkund, Taluka Sampgaon.
(8)	,,	,,	,,	Wantmuri, Taluka Hukkeri.
(9)	,,	,,	,,	Deshnur, Taluka Sampgaon.
(10)	,,	,,	,,	Bellad-bagewadi, Taluka Hukkeri.

The society at Wantmuri was duly registered. As for the other three societies, their proposals, etc., were taken up at the close of the year. These societies will be registered early in the ensuing year.

There has been a good progress in the organisation of societies during the year. Attempts were made to organise other artisan societies like Cobblers' Society at Saundatti in Parasgad Taluka and Bamboo workers society at Khanapur in Khanapur Taluka of this district. Work in this direction is in progress.

79. **Model villages.**—Some villages from each taluka have been selected by the Collector of Belgaum, in consultation with the respective Taluka Mamlatdars, for carrying out intensive rural development activities, so that these villages would be turned into Model villages in due course.

Periodical visits were paid to these villages. Following is the summary of work done in some of these villages.

(1) **Wantmuri (Hukkeri Taluka).**—One oil ghany was installed. The Teli who took the above ghany was sent for Haskell Oil Ghany Training Class. (*a*) Weavers'

Co-operative Society was organised and registered; (*b*) One boy was sent for glass bangle training class.

(2) **Chandgad (Chandgad Mahal)**.—One Haskell Oil ghany was installed. (*a*) One boy was trained in Government Lohars' and Sutars' Training Demonstration, Belgaum, (*b*) an order of 4,000 Helves (War supply work) was secured for a contractor of this village.

(3) **Vakkund (Sampgaon Taluka)**.—Weavers' Co-operative Society was organised.

(4) **Deshnur (Sampgaon Taluka)**.—Weavers' Co-operative Society was organised.

(5) **Aigali (Athani Taluka)**.—Spinners' and Weavers' Co-operative society was organised.

80. **Rural Assistants**.—Two Rural Assistants were working under this office during the last year. As the work increased two more Rural Assistants were taken up in the beginning of the year under report :—

(*a*) All the Rural Assistants visited about 170 villages and collected about 6,500 names of traders, cottage workers and factories.

(*b*) Boys that were sent for training in the Departmental Training Institutions were secured by these Assistants.

(*c*) Four societies were organised in this district. Collection of share capital etc., and other preliminary work in connection with these societies was done by them.

(*d*) During the course of survey of industries, survey about natural resources, minerals, etc., was carried out. As a result, some crystals found at Hoskoti in Gokak Taluka of this district were sent to this office by the Rural Assistant of this office in that part. These were sent to the Industrial laboratory of this Department for test. It is found that some optical instruments can be manufactured from these crystals.

In general, the work of the Rural Assistants was fairly satisfactory and carried on systematic lines though the progress seems slow.

81. **Touring of the Officer.**—During the year under review, the Officer was on tour for 124 days. Many important places and villages in this district as well as in other districts were visited.

82. **Rural Development Work.**—Taluka Bi-monthly meetings called by the Taluka Mamlatdars as well as District Officers' meetings were attended by this officer. So also meetings of Weavers' Societies, Taluka Development Associations, Board and General Body meetings of the District Industrial Co-operative Association, Belgaum, were attended. During meetings all possible information with regard to development of industries was given.

Commercial Directory :

(A) Compilation of a Commercial and Trade Directory.

83. During the year under review 170 places were visited. Of these 120 places were new, i.e., taken up for the first time. Census of about 6,500 shops, cottage workers' families and factories was carried out. 2,058 names were supplied to the Commercial and Intelligence Section of the Head Office.

(B) Survey of Industries and General Report on the Belgaum District.

As per the plan sent to this office by the Commercial and Intelligence Section of this Department, this work was taken up during the latter half of the year under review. Necessary information was being obtained from records of various offices and

from big industrial concerns. Compilation of the final report was taken up nearly at the end of the year and the same work is now in progress.

84. **Office Library.**—In the beginning there were some Departmental bulletins and publications in the library of this office. The total number of books then was 64. During the year under review, 35 new books were added. Among these 35 books, 30 books were on various industrial subjects and these were purchased through the Commercial and Intelligence Section of this Department. Total number of books at the end of the year was 99.

85. **Nur Imdad Vegetable Oil Lamps.**—During the year under report 200 lamps were sent to the Mamlatdar of Gokak Taluka of this district for free distribution in that taluka, as per his request. In all 1,150 have been distributed in some of the villages of each taluka of this district to the agriculturists and the artisans who are this district to use such lamps. Reports on the general working of these lamps in interested have been submitted through the Collector of Belgaum to the Director of Industries, Bombay.

The District Industrial Officer, Nasik.

86. The activities of this office in general are summarised in the following report.

Complete directory of industrial establishments and census of artisans have been prepared. A systematic survey report of all principle industries in the district is under compilation. The work in connection with the Industrial Statistics Act of 1942 has been initiated in the district.

87. All the four demonstrations which were working in the district during 1942-43 continued to work in the district.

The Boot-lace School was transferred from Nasik to Satana. During one term at Satana only six students attended. It was, however, noticed that weavers of the agriculturists classes are not for the present very mindful about training. The school is meant for teaching them side industries such as Boot-lace and newar manufacture, carpet weaving, etc. It may be due to the present favourable atmosphere prevailing in their trade. It was found that the school has not enough scope in this district and therefore it is recommended for transfer to other district.

The Hand Weaving School, Yeola, had full number of students throughout the year. They have shown keenness and aptitude for producing every pattern of I. S. D. order. The school has mainly helped the Yeola Association and the Sales Depots at Nasik and Bombay in getting the required samples to perfect compliance of the orders.

The Fibre Demonstration was transferred to Palkhed in Taluka Dindory from Kasbe Sukene in Taluka Niphad. This village has a fair population of hereditary fibre workers. Yet it was noticed that they are indifferent towards training. The school had no full time attendance throughout the year. The present demand for fibre and fibre goods being big and continuous the fibre worker is busy in preparing fibre only for which he gets good return. He is, therefore, not attracted for the day-time training at the school. Candidates, however, attended for a few hours in the evening.

The Tanning Demonstration was transferred from Vani in Taluka Dindory to Nandgaon. 39 tanners attended at the two centres. Similar to hand weaving school, Tanning Demonstration gives training in keeping with the trade of the artisans and not affecting their income. Hence these have been popular and properly attended. The Tanning Demonstration has done useful work at all the four centres visited by the demonstration in the district, where it has left permanent good results. At

Bhagur the Tanners have formed a Producers' Co-operative Society. At Vani and Satana they have formed Unions as Common Working Organisations. At these places they have made arrangements for building sheds and water supplies.

4 Wool weavers and one Rural Assistant were sent by this office for a Wool Dyeing class conducted by the Wool Expert at Ahmednagar. The candidates have duly completed training and are able to show colour effects in their fabrics.

4 candidates were directed for—(1) Glass work, (2) Hand-made paper manufacture, (3) Dyeing and Printing and (4) Embossing and engraving.

88. **Subsidy-cum-loan Scheme.**—There are only 7 loanees—2 for tanning, 2 for leather working, 1 for metal work and 2 for Boot-lace manufacture. Their work is satisfactory and payment of instalments is regular. 10 new applications have been submitted.

89. **Aid to Educated Unemployed.**—Two candidates were granted aid in 1942-43 (1) for metal work and (2) for chalk manufacture. The former is doing good business. The latter had concentrated on experimenting for improvement of his product and has now succeeded. One application for hosiery industry has been granted during this year.

90. **Industrial Co-operative Association Ltd., Yeola.**—Great activity prevailed at the Association till November 1943 and the Association engaged more than 600 looms while executing the I. S. D. Orders.

The looms declined gradually after November 1943 as the weavers were offered excellent wages outside for seasonal work in the market. They, therefore, left the work at the Association and joined the market.

91. **Industrial Co-operative Association Ltd., Malegaon.**—In the weaving shed ready-balled warps were prepared and supplied to weavers. This saved a large waste of yarn and time due to individual warping. The Association arranged for the supply of sugar and kerosene oil to weavers. Moreover an agency for standard cloth was managed, thus helping the poor people in getting cloth at lower rates when the cloth market had actually gone abnormally high. This Association also executed orders received from the Indian Stores Department.

92. **Weavers' Co-operative Society, Vinchur.**—This is working as a branch of N. C. D. Industrial Co-operative Association, Ahmednagar. The working report of this institution will be submitted by the N. C. Industrial Co-operative Association, Ahmednagar.

93. **Rural Development Board, Nasik.**—The District Rural Development Board, Nasik, sanctioned Rs. 1,500 for development of industries in Backward area in 1942-43. 13 candidates were selected from Peint area who were granted scholarships and sent for training in suitable industries to 5 demonstrations in the Province. The candidates completed their training during the year. They are being provided with capital and equipment under subsidy-cum-loan scheme. They will be organised in units and worked at a common centre in the Backward area.

The Rural Development Board, Nasik, gave Rs. 500 in 1942-43 for tanning sheds at Bhagur and Satana and Rs. 750 in 1943-44 for a shed and well at Vani. The tanning shed at Satana was completed during the year. Sheds at other places are under erection.

The Rural Development Board also gave from time to time short-term loans to the extent of Rs. 770 to 22 poor tanners to undergo training at the demonstration.

One Wool Weaving School is to be started shortly at Naigaon under the guidance of local trained wool weaver to teach the wool-weaving manufacture of rugs and blankets. These articles are very much in demand at the Depot. The School admits four candidates for a term of six months. The District Rural Development Board, Nasik, gave Rs. 840 during the year towards the expenditure of this school. Another school is also organised at Manegaon, in Sinnar Taluka.

At four places the cottage artisans have formed Unions to represent and work in common. Such organisations are also encouraged at 8 other centres.

94. **The Rural Development Board, West Khandesh.**—The handloom weavers of Dhulia were found to be in need of certain weaving appliances. The Rural Development Board, West Khandesh, granted Rs. 1,000 for supply of such appliances. The grant was made over to Khandesh District Industrial Co-operative Association Ltd., Dhulia, with instructions to help the weavers.

To eliminate the long-standing difficulty of water supply of a Tannery at Nandurbar where about 50 tanners work at a time, a plan of pipe line supply was designed. This was estimated at Rs. 2,600. The District Rural Development Board, West Khandesh, granted Rs. 1,000 while the tanners contributed Rs. 1,600. So the work of erection has been started through an approved contractor.

The working of the Liquor-cum-cloth Depots in West Khandesh District was noticed. All these depots have annual sales of about Rs. 33,000. It was noticed that the entire cloth for the Depots can be supplied from handlooms. Through consultations with the Superintendent of Excise, Jalgaon, the entire order of cloth could be directed to K. D. Industrial Co-operative Association. So far, cloth worth Rs. 13,000 has been supplied.

95. **Haskell Oil Ghani.**—In all 12 ghanies have been installed in the district since 1942 and 4 new will be installed very shortly. All the ghanies are working satisfactorily and repayments of the instalments by the oilmen have been regular.

96. **Nur Imdad Lamps.**—400 Nur Imdad lamps were distributed in the district since 1942. The lamps have proved very useful during the present day scarcity of kerosene. There is a great demand for these lamps by agriculturists.

97. **Co-operative Societies.**—The Bhagur Co-operative Leather Works was registered in 1942. The turnover of the society during the year is Rs. 12,815-14-2 and net profit Rs. 262-8-4. There are 27 members. The Bombay Provincial Co-operative Bank has sanctioned a loan of Rs. 2,000 for the year. Members are engaged in tanning and mostly in leatherworking which is profitable today. The Society has resolved to build its own shed at the cost of Rs. 1,500 on the plot granted by Government.

The Yeola Teli Society's proposal has not yet been registered pending sanction by the Registrar of Co-operative Societies, Poona. Therefore, this society has not come into existence. The Telies, however, are having full work at present.

A new Producers' Co-operative Society of Weavers of Satana has been recently registered with 34 members and a share capital of Rs. 610. The weavers are obtaining at present only yarns out of the common funds. The Bombay Provincial Co-operative Bank has sanctioned a loan of Rs. 2,000 to the society. A similar society of weavers of Sinnar is under organisation.

98. **District Agricultural Shows.**—At the two District Agricultural Shows held at Nasik in February 1944 and at Sarangkheda in West Khandesh District in December 1943, this office organised industrial sections and the departmental stalls. His Excellency the Governor who opened the Show at Nasik witnessed the Industrial section interestedly and appreciated the work displayed by artisans. The District Sales Depot had exhibited the production varieties of prominent cottage industries in the district and the province. The trainees demonstrated the working of improved methods and appliances. Later Her Excellency had placed an order for a piece of certain cloth. The piece was duly supplied after getting it manufactured from Yeola Association. The piece was actually prepared by a trainee of the Hand Weaving School, Yeola.

99. **General.**—This office received large number of enquiries from Industrial establishments and artisans regarding guidance in commercial statistics, arrangements and recommendations for facilities in obtaining raw materials—controlled or uncontrolled.

The District Industrial Officer worked on the Standard Cloth Committee and the Exhibition Committee of the District. All meetings of the Rural Development Board, Nasik and West Khandesh were attended. The meetings of the co-operative institutions and those held for war publicity were also attended. At certain programmes of the Rural Development Van in the District the Rural Assistants and the District Industrial Officer represented the Department.

During the year the District Industrial Officer toured in Nasik and West Khandesh Districts and visited 42 centres in total touring of 149 days. The Manager visited production centres all over the province and helped the District Industrial Officer in the organisation of cottage and small-scale industries.

DISTRICT INDUSTRIAL OFFICER, SURAT.

100. **Industrial Training.**—The following peripatetic parties worked in the district :—

(1) Dyeing and Printing Demonstration, Bulsar.

(2) Weaving School, Anjalav.

(3) Coir Demonstration, Dhumadia.

(4) Tanning Demonstration, Lilapore.

(5) Tanning Demonstration, Kachholi.

Their work was supervised from time to time.

Arrangements were made by the District Industrial Officer for sending 12 candidates from this District for training at the various schools of the Department outside the district.

Four scholarships were secured from Sir Purshottamdas Thakordas for the students of the Districts studying at the Leather Working School. Inspection visits were paid in the company of the Deputy Director of Industries to the following Technical Institutes at Surat :—

(1) Parekh Technical Institute, Soni Falia, Surat ;
(2) Parsi Technical Institute, Majura Gate, Surat ;
(3) Peripatetic Industrial classes for the Backward classes.

Various villages and towns in the district were visited for the location and selection of premises for the proposed peripatetic industrial and bias classes for the Backward classes.

101. **Weights and Measures.**—The work of the Inspectors of Weights and Measures in Surat District was supervised. Their offices were inspected from time to time.

102. **Commercial Directory.**—As per the revised instructions of the Officer-in-charge, Commercial and Industrial Intelligence a list of manufacturers and dealers for the commercial Directory was prepared.

103. **Survey of Industries.**—Detailed survey of the following industries was made :—

(a) Leather and Foot-ware industries.
(b) Sandal Wood carving industry.
(c) Wool weaving industry.
(d) Powerloom industry of Surat City.

104. **Grants to cottage industries by District Rural Development Board.**—

(1) A sum of Rs. 2,000 was granted by the Rural Development Board to organise a tanning demonstration class for the District. The demonstration class was organised by the District Industrial Officer with the help of the Government Tanning Expert.

(2) A sum of Rs. 50 was granted for printing leaflets about the various classes conducted by the Department of Industries.

(3) A sum of Rs. 50 was granted to meet transport charges for the goods of the small-scale and cottage industries for the exhibition organised by the Rural Development Board at Bulsar.

(4) A sum of Rs. 200 was granted for boring a well for the tanners at Vapi.

These grants were made on the recommendations of the District Industrial Officer by the District Rural Development Board, Surat.

105. **Nur-Imdad Lamps.**—A large number of Nur-Imdad lamps were distributed throughout the district with the help of Rural Assistants and people were given advice about the correct way for the maintenance and operation of the lamps.

106. **Technical Library.**—The small library that was established was expanded by addition of up-to-date books on industries. Good many persons of the District have been taking advantage of the reading facilities offered at the library.

Technical advice was given to industrial concerns for preparing copper wire from copper scrap ; for seasoning of wood for bobbins and utilising waste wood in manufacturing toys ; for the maintenance of oil engines.

107. **Help to industries to overcome their difficulties.**—

(a) **Weaving Industry of Surat City.**—The case of the Powerloom Industry of Surat was put up to the Director of Industries for the exemption from the yarn and cloth control order. The case of the Power-loom factories of Surat City was explained to the Textile Commissioner Mr. Vellodi when he paid visit to Surat.

The necessary exemption from price printing has been given to the power loom factories of Surat, having less than 25 looms.

(b) The case of soap manufacturers of Surat City was forwarded to the Director of Civil Supplies through the Director of Industries for the supply of cocoanut oil. The necessary arrangement has been made for the supply of cocoanut oil.

(c) The case of the Tile Factory of Surat was recommended to the Controller of Cement and the necessary quantity of cement was secured for the factory. The factory which was closed down for want of cement started working again after getting the cement.

(d) A local small-scale shuttle manufacturer was experiencing difficulty in selling the shuttles he was manufacturing. He was put in touch with the local textile mills and various power-loom factories.

108. **Subsidy and loans to artisans.**—Wide publicity was given about the subsidy and loan scheme to the Artisans and to educated unemployed and the following artisans who took training at the Tanning Institute and the Tanning Demonstration class were granted loan free of interest during the year under report under the Scheme of the Department for the grant of loan and subsidy to Artisans :—

		Rs.
1.	Mr. Lallubhai Jairam Parmar, Sisodra	750
2.	,, Chhaganlal Kalabhai, Hansapore	150
3.	,, Devjibhai Dahyabhai, Hansapore	100
4.	,, Narotamdas Vithaldas Patel, Adajan	650

		Rs.
5.	Mr. Dhulabhai Kalyanji Solenki, Hansapore	100
6.	,, B. S. Chamar, Vapi	250
7.	,, J. S. Chamar, Vapi	250
8.	,, M. N. Chamar, Vapi	150
9.	,, M. M. Chamar, Vapi	150
10.	,, C. D. Chavan, Hansapore	200
11.	Messrs. R. R. & W. S. Chamar, Vapi	100

Under the Scheme of Loan and Subsidy to Artisans Mr. N. V. Patel was granted loan of Rs. 400 as subsidy and loan towards the cost of appliances and tools and Rs. 250 as loan to meet the cost of raw materials and to serve as working capital. After getting the loan Mr. N. V. Patel started a small factory at Chanda Wadi, Surat manufacturing various types of sandal wood boxes, frames for photo, calender, toys etc. The work of the loanees was supervised from time to time.

109. **Kerosene permits.**—This office scrutinised applications for kerosene permits for Surat District for kerosene required for industrial use. On the recommendations of the District Industrial Officer necessary permits were issued by the Collector to various factories of the district. In view of these facilities various industrial establishments were able to obtain kerosene at reasonable rates. In contrast to this the manufacturers of other districts have to pay heavy prices for kerosene required for industrial use. Similarly applications for coal were also scrutinised and were sent to the Director of Industries with recommendations.

110. **Propaganda for Industrial Training.**—Propaganda about the various classes conducted by the Department of Industries was done with the help of the Rural Assistants. Leaflets about the various classes conducted by the Department were printed and were distributed. Propaganda was also done by means of magic lantern slides.

111. **Shows and exhibitions.**—

(a) **Gold and Silver Thread Exhibition at Surat.**—At the request of the Collector of Surat, the District Industrial Officer organised at his office gold and silver thread Exhibition on 15th January 1944. His Excellency the Governor, Sir John Colville, Lady Colville and Miss Colville paid visit to the Exhibition on 15th January 1944. Their Excellencies were very pleased with the exhibits and the arrangements of the exhibition.

In the Exhibition various processes about the manufacture of gold thread were shown by means of photographs of various machines and with the help of various samples manufactured by each machine. Metal-melting, wire drawing through steel and diamond and ruby dies, wire flattening, winding of flattened wire on silk thread, gilding processes which are done at Surat in a number of scattered factories on cottage industry basis were some of the items shown with the help of photographs and samples.

Actual demonstrations were given by the artisans about the manufacture of chalak, salma, kangri, tiki, flattening of wire, border weaving, embroidery work etc. The most note worthy demonstration was by a weaver who showed weaving of gold thread and silk border on a loom with a dobby having 100 shafts.

In one section there were various finished products of Surat using gold thread. Jari-georgatte saris, embroidered saris, various designs of borders, were exhibited. Samples of kinkhab cloth were also exhibited. Two pieces of kinkhab cloth were purchased by Her Excellency Lady Colville from the exhibition.

In one corner of the exhibition, a loanee of the Department gave demonstration about sandalwood carving and inlaid work.

At the suggestion of His Excellency the gold and silver thread and jari exhibition was kept open for public for two days and it attracted a good crowd.

(b) **Fruit show and general exhibition at Bulsar.**—A fruit show and general exhibition was held at Bulsar on 6th June 1943 under the auspices of the Rural Development Board, Surat.

The District Sales Depot, Surat, also took part in the exhibition. The Collector and Chairman, Rural Development Board, Surat, sanctioned a sum of Rs. 50 for posters and transport charges of the goods of the District Sales Depot for display at Bulsar. A section of the pandol of the Fruit show and general exhibition was reserved for the Department of Industries. Therein goods manufactured by the small scale and cottage industries of the Province and especially of the district were exhibited.

A special feature was that very attractive posters were prepared by a loanee of the Department of Industries. The Sales Depot section was a good attraction for the visitors and the sales effected during one and half hour was Rs. 106. Visitors showed keen interest in the products of the cottage industries and the activities of the Department of Industries. Many enquiries were received about the classes of the Department of Industries.

The Collector of Surat and Chairman, Rural Development Board, Surat, paid visit to the District Sales Depot section and appreciated the arrangement of the goods.

The District Industrial Officer gave a talk at the exhibition to the visitors about industrialization.

(c) **Vegetable show and general exhibition at Surat.**—Various products of cottage and small-scale industries were exhibited at the exhibition which was held under the auspices of the Rural Development Board at Surat. The Commissioner, Northern Division and the Collector, Surat, paid visit to the stall of Industries Department and very much appreciated the sandalwood carved boxes and kinkhab cloth.

112. **Tour during the year.**—All important villages and towns were visited by the Rural Assistants and by the District Industrial Officer during the year under report.

113. **Meetings.**—All the meetings of the District Rural Development Board, Chief local official's meetings, Bi-monthly meetings of the District offices all important meetings of the Surat Chamber of Commerce were attended by the District Industrial Officer and whenever necessary, the activities of the Department were explained and whenever possible grants were secured for the activities of the Department of Industries.

CHAPTER XIV.

FISHERIES.

MARINE FISHERIES.

114. **Launches.**—The number of launches in operation during the fishing season was nine as against eight in the previous year. The additional boat was the "Ruparel" owned by the International Fishing and Trading Company. This vessel is equipped with 100 B. H. P., G. M. land engine converted for marine propulsion. The launch is the largest vessel in the fishing fleet and can carry about 3,00,000 mackerel at a time. Two vessels namely, the "Hilda" and "Hydari" which worked last year for a short period were acquired by the Navy. In place of these, the "Nooremohamadi" and "Rahamani" referred to in the previous year's report

commenced operating. Two further vessels were put into commission almost at the end of the fishing season. They are the "Mackerel Queen" owned by the International Fishing and Trading Company, and "Somawati" owned by Model Fisheries (Bassein). The "Mackerel Queen" and "Somawati" are both equipped with 45—55 Mercedes Benz diesel land engines.

The strength of the fishing fleet would have been greater, as there were four complete hulls at the end of the year, three being newly constructed and one having been already completed before the period under review. Two of these newly constructed hulls were the property of Janjira Fishing Company and Messrs. Thakur and Co., at Vijaydurga, while the third hull belonged to Messrs. J. S. Parkar and Company, who acquired it for Rs. 20,000. The reason why these hulls could not be put to sea was because engines were not available to instal on them.

The problem of engine trouble was acuter than in the previous year. One of the contributory factors was the indifferent performance of land engines converted for marine propulsion. Other factors accounting for the aggravation of the problem were the unavailability of spare parts and the absence of expert technical attention for supervision of repairs on account of the war.

The number of launches with converted land engines was four namely—"Sir Frederick Sykes" "Lady Brabourne", "Ruparel" and "Rahamani".

These vessels gave much trouble and the number of their trips was far fewer in comparison with that of the launches equipped with marine diesel engines. The laying-up for a long period of the four vessels equipped with land engines thus affected the volume of fish transported to Bombay. In view of the pressing need to bring as much fresh fish as possible to Bombay the question of the substitution of land engines by marine diesel engines was taken up, This department addressed the Naval authorities, and the Director General of Ship building and Repairs for relief by provision of new engines, but without success as the engines were needed by the Naval authorities. The Government of Bombay have since taken up the matter with the appropriate authorities.

115. **Fish brought by the launches.**—The total quantity of fish brought by the launches was 11,54,053 lb. as against 28,34,169 lb. in the previous year. As already stated the striking disparity between the quantity of fish brought during the period under review and the previous year was due to the smaller number of vessels operating, consequent on the trouble arising from the engines. (Appendix L).

The facility afforded by the Collector of Central Excises and Salt Revenue, Bombay, to carry vegetables and fruit in addition to fish, aboard the fish carrier launches, was taken advantage of by the launch owners, to the great benefit of the agriculturists in the Ratnagiri district. This facility enabled the launch owners to make the utmost use of the cargo space and thus augment their earnings, which had considerably suffered on account of engine trouble.

The eight vessels "Lady-Brabourne", "Lord Brabourne", "Lady Sykes", "Karimi", "Chandtara", "Hilda", "Hydari" and "Rahamani" jointly brought to Bombay from April, 1943, to March, 1944, 35,55,400 mangoes aggregating about 23,85,680 lb. in weight.

116. **Fish landing sites.**—The difficulties arising from the lack of proper landing facilities continued in a greater degree at Sassoon Dock. The question of landing facilities at this dock can only be overcome if a special area is allotted for the landing of fish.

117. **Cold Storage Facilities.**—One of the problems confronting the fishing industry in this province is the lack of sufficient facilities for preservation of fish in cold storage during the glut season. The ice factory and the cold storage plant at Sassoon Docks on account of the favourable location, continued to serve the large quantities of fish landed there by the launches and sailing craft. The plant has a storage capacity of 150 tons which, the owners are prepared to double provided Government made available the necessary insulating material as well as pipes, cement and bricks. Their application has been forwarded to Government for consideration in view of the urgent problem to conserve all available supplies of fish landed on account of the general food problem.

118. **Apprentice Scheme.**—Additional youths continued to take advantage of the scheme for the training of apprentices to serve eventually as engine drivers aboard the launches. The number of youths who have availed themselves of this facility since the inception of the scheme is 26, out of which 11 have already duly qualified having obtained certificates from the Mercantile Marine Department. The number of those who have completed their course is 12, and two are yet under training. The utility of the training may be gauged from the fact that all the qualified candidates are now in independent charge of launches.

119. **Fisheries Information Bureau.**—The valuable role played by this branch of the Fisheries Section was further exemplified during the period under review. A steady increase was noted in the number of enquiries that came up for disposal by the Bureau. The enquiries, running over a wide variety of subjects, were not only from the City and the Province of Bombay but also from other provinces. Information was sought on the process of the manufacture of shark liver oil, preparation of concentrates, preservation of fishing nets, and supply of larvicidal fish for destruction of malaria bearing mosquitoes.

Mr. V. S. Gaikawad, B.Sc., Deputy Director of Fisheries, Baroda (on probation) and Mr. M. P. Motwani, B.Sc., Assistant Superintendent of Fisheries, Sind, were deputed by their respective Governments to undergo training in the various branches of fishery activities of this province. They were enabled to acquire an insight into the fishing activities of the City by members of the staff who took them round to fish landing sites and fish markets and acquainted them with various aspects of fish trade. Both Messrs. Gaikawad and Motwani also received instructions in the method of extraction and testing of shark liver oil.

Miscellaneous activities.

120. **General Assistance rendered.**—(1) The department helped the owners of the ice and cold storage plants at Sassoon Dock and Malvan to overcome the difficulty of securing the supplies of anhydrous ammonia, a chemical essential for the manufacture of ice. Their case was taken up with success by this department with the Controller of Supplies.

(2) An ice factory owned by Messrs. A. Burjor and Company, a prominent firm of fish merchants, had been lying idle at Dohad, in the Panch Mahals districts, about 100 miles from Baroda. The capacity of the plant was an output of four tons of ice daily. Besides it contained two cold storage rooms. The firm approached this department with a request to obtain the permission of the Central Government for the transfer of the plant from Dohad to Madwar, on the coast, in Kathiawar. Their application was recommended to the Controller of Supplies, New Delhi, who kindly granted the permission. The plant, owing to its location in an important fishing centre, has now proved to be of inestimable value to the fishing trade there, inasmuch as it has dispensed with the former need for the carriage of the ice from Bombay to Madwar, an important fishing centre in Baroda territory.

(3) The fishermen were experiencing considerable trouble, owing to having to deal with intermediaries, in obtaining supplies of coal tar, a product indispensable in their trade. Coal tar is used largely to tar nets, ropes and buoys. Frequent representations were made by the fishermen to this department, which eventually took up the case with Mr. G. Gladstone of the Bombay Gas Company. Mr. Gladstone was most helpful, in helping the department to meet the requirements of the fishermen in view of the urgency of the demand for coal tar. He has, so far, made available 60 tons out of 150 tons of coal tar which the fishermen need.

(4) The department also took up the case of a prominent fisherman from Colaba who had represented to it, his failure to secure priority certificates for two wagons for the transport of "Bark" from Nasik to Bombay. The bark is used extensively to tan and preserve fishing nets. The department forwarded his representation to the railway authorities, who made arrangements to spare two wagons for the purpose.

(5) One of the major problems confronting the owners of launches is their inability to secure sufficient fuel for the operation of the launches, diesel oil being controlled. The Controller of Supplies was approached in the matter by this department, and as a result of the efforts, launches used as carriers of fish were given a higher place in the priority list for diesel oil.

(6) Fishermen have been experiencing increasing difficulty in getting a sufficiency twine both for the manufacture and repair of fishing nets. They had been charged exhorbitantly by dealers who got the yarn at controlled prices but sold the twine at fantastic prices. The fishermen laid their grievances before this department, pleading that twine should be manufactured at one of the mills over which Government had assumed control. The twine should then be made available to the fishermen, on the recommendation of this department, at controlled price. The department placed this suggestion before Government, who directed the Yarn Commissioner to investigate the question. The department supplied the Yarn Commissioner with figures of the appropriate requirements of twine and sail cloth needed by the leading fishing villages.

(7) Similarly, particulars of the amount of timber for the construction of boats and stakes were forwarded by this department to Government, as timber is now controlled and the fishermen cannot obtain it easily.

(8) Stoppage of imports of fishing hooks has resulted from the war, and fishing activities are greatly affected by the fishermen's inability to procure the hooks in the market. To afford relief to the fishermen, this department obtained a license from the Steel Controller for the purchase of steel, and steps are now being taken for the manufacture of hooks locally.

(9) One of the launch owners applied to this department for batteries to start the engine of his launch. The application was forwarded to Government with a strong recommendation. Government of Bombay accordingly addressed the Government of India on the subject, and the representation was successful inasmuch as it resulted in securing for the launch owner a permit for the acquisition of the necessary batteries.

(10) One of the launch owners urgently needed a ball bearing for the reduction gear of his launch. The S. K. F. Ball Bearing Company Ltd. was approached on behalf of the launch owner and the Company released the required ball bearing on the condition that if it were needed for a battleship it should be returned immediately. This condition was accepted.

The same launch owner wanted to get the crank shaft and bearings of one of his launches re-metalled. The necessary facility was secured for him through the Assistant Director of Metals, Bombay.

(11) The members of the medical profession in Bombay submitted a memorandum to His Excellency the Governor of Bombay and waited in a deputation on the Governor in order to represent the urgent need for increased supplies of food to the city. That part of the representation which dealt with the question of the Development of Fisheries was forwarded to this department for report. Based on the representation, the Fisheries Officer outlined the conditions governing increased supplies of fish. The note emphasised the need for more engines for installation in fishing vessels. It also recommended the desirability of providing temporary twine and sail cloth to the fishermen at controlled rates. The note is receiving Government's attention.

(12) The fishermen at Colaba suffered a great loss during the year, when a fire broke out in their village on January 10, 1944, and destroyed 27 huts of the fishermen and their nets and other fishing gear. The fishermen made a representation to Government for assistance. The Fisheries Officer investigated the loss suffered by the fishermen, which amounted to Rs. 1,18,694, and made a report to Government. The recommendations of the Fisheries Officer for help to the fishermen were accepted by Government who were pleased to grant them Rs. 59,347 as subsidy and the balance as loan free of interest repayable in ten years.

The entire fishing community was very grateful to Government for the assistance afforded, for without it their trade during the monsoon would have been at a complete standstill.

121. The Fisheries Officer was appointed during the year a member of the Fisheries Committee of the Imperial Council of Agricultural Research. He attended a meeting at Delhi in December 1943. This meeting was noteworthy as it included a number of distinguished persons, namely, the Honourable Sir Jogendra Singh, Finance Member of the Government of India, and Prof. A. V. Hill. The meeting was presided over by Sir P. Khareghat. Others present were Commissioner of Animal Husbandry with the Government of India, Director of Food Production and Director of the Zoological Survey of India. The most important item was the question of the creation of an All-India Central Research Institute under the Imperial Council of Agricultural Research. The discussion was opened by Dr. B. Prashad. The proposal was strongly supported by Prof. A. V. Hill. He urged upon the Government of India to ensure the importance of constituting an All-India Institute with qualified and competent staff for the development of the Fishery resources of India on scientific lines. Such an institute would control, co-ordinate and guide fisheries research, so as to link it up with fishery research in other parts of the British Empire and elsewhere in the world and to act as a clearing house for information in regard to research and other fishery matters. The Honourable Sir Jogendra Singh also spoke on the subject. He stated that he realised the importance and vastness of the subject and promised to support it when a proper scheme would be drawn up.

A small Fisheries Sub-Committee consisting of three Officials and four non-Official expert members was appointed to examine the question in detail at Delhi on January 1st and 2nd.

The following were appointed Official members :—

1. Dr. B. Prashad .. Director of the Zoological Survey of India, Calcutta (now Fisheries Development Adviser to the Government of India, New Delhi).
2. Dr. S. L. Hora .. Director of Fisheries, Bengal.
3. Dr. B. Sundaraj .. Retired Director of Fisheries, Madras.
4. Dr. S. B. Setna .. Fisheries Officer, Bombay.

The Sub-Committee met at Delhi on January 1 and 2, and worked out in detail the question of costs, facilities, personnel required, programme of work, location of

institute and finances. The outcome of the Committee's deliberation was a decision to establish a central fisheries research station in Bengal at a cost of Rs. 7,00,000 and a sub-station in Bombay at a cost of Rs. 10,00,000.

The Fisheries Officer was requested to prepare a note setting forth particulars, viz., equipment and cost of two vessels intended for service as research vessels at the main and sub-station in Bengal and Bombay respectively. A note containing detailed information was forwarded to the Secretary, Imperial Council of Agricultural Research.

FISH CURING YARDS.

122. **Number of Yards.**—The number of fish curing yards in existence at the beginning of the year 1943–44 was the same as in the previous year, viz., 33, of which 19 were in the Ratnagiri District and 14 in the Kanara District. The total number at the end of the year, was, however, one less, owing to the closure of one yard in the Ratnagiri District with effect from June 1, 1943, bringing the total to 32. Out of these, 11 are conducted on a 12-monthly basis, 14 in charge of 9–monthly yard officers and the remaining seven were petty yards in charge of petty yard officers.

123. **Fish cured at the yards.**—The principal kinds of fish brought to the yards for curing were mackerel (Bangada), catfish (Shingala), dhodi, sharks (Mushi and Mori etc.), surmai (Seer), gedar and karmat (mixture).

The prices of fresh and salted fish rose considerably owing to increased demand from civilians as well as the military. The "Grow More Food" campaign was instrumental in causing a rise in the price of beach-dried manure as all the available stocks of manure were utilised by agriculturists.

During April and May large quantities of karmat, dhodi, black pomfret and sharks were caught but on account of the early onset of the monsoon and the cyclone that hit the coast in the 3rd week of May, fishing operations were brought abruptly to a standstill. The main season started as usual in September, and dhodi, shingala, sharks, and surmai were the first to appear. During the year under review 27,892 maunds of dhodi, 39,666 maunds of shingala, 14,190 maunds of sharks and 13,759 maunds of surmai were brought to the yards for curing as against 6,506 maunds of dhodi, 37,158 maunds of shingala, 12,571 maunds of sharks and 9,545 maunds of surmai in the previous year.

The mackerel season was not so fruitful as in the previous year. The season started late in October and on account of frequent bursts of squally weather in October-November, which is usually the peak period of the fishing, mackerel did not approach near enough within the radius of the rampan net and completely disappeared by the end of January. During the year the yards at Karwar, Bingi, and Chendia cured 41,775 maunds, 36,261 maunds and 30,695 maunds of mackerel as against 68,384 maunds, 59,205 maunds and 38,962 maunds respectively last year. The contractor's failure to secure a sufficient number of vessels for transporting salt also contributed to the decrease in the consumption of salt at these yards. The sales of salt at the 33 yards during the year under report were 1,02,408 maunds as against 1,26,913 maunds last year and would have been yet higher but for the fact that many fishing vessels at Jaigad, Kalbadevi, Mirkarwada, Ratnagiri, Purnagad, Jaitapur and Vijaydurg were laid up for want of crew. Several able bodied fishermen either entered the Royal Indian Navy or went to Bombay and Karachi for service on more remunerative jobs.

Catches of Gedar and Karmat, which were second and third in importance, were brought in fair abundance to the fish curing yards throughout the period from September to March. Pedwe, Karli, Khavali, Ghol, Dagol and Pomfret formed the next important varieties of fish that occurred irregularly on our coast.

124. **Karwar Yard.**—The record for the highest sales of salt during the year went to the Karwar yard, where 13,229—20—0 maunds of salt were sold. Large quantities of salted fish were bought from this yard by some merchants, the location of the yard being a favourable factor in attracting the business. The yard abuts on the cove which is sufficiently deep and this affords facilities for both loading and unloading. Moreover, fish cured at this yard is of superior quality, as the yard is equipped with special cement concrete platforms.

125. **Use of salt earth.**—As in previous years fishermen of Kalbadevi, Purnagad, Mumbri, Mithbao, Achra, Talasil, Devbag and Kochra in the Ratnagiri District, and Majali, Kodar, Keni, Gangawali, Kumta, Manki, Murdeshwar and Shirali in the Kanara district used salt earth on an extensive scale to cure fish, despite ceaseless propaganda by the Inspector of Fisheries against its use.

126. **Talasil Yard.**—As reported in the previous year the yard at Talasil was closed with effect from June 1, 1943, as the yard was not self-supporting. The fishermen of Talasil and neighbouring villages have again applied for reopening the fish curing yard on the old site and have agreed to make good any loss.

127. **Transactions at the yards.**—During the year a total quantity of 3,50,613 maunds of fresh fish was brought to the yards, 1,02,408 maunds of salt was issued for curing fish, 39,115 maunds to the yards in the Ratnagiri district, and 63,293 maunds to the yards in the Kanara district as against a total quantity of 1,26,913 maunds issued last year in both districts. The quantity of cured fish removed from the yards was 2,57,256 maunds. 40,062 maunds of salt was indented from Uran for yards in the Ratnagiri district and 67,836 maunds from Sanikatta for yards in the Kanara district. (Appendices M & N).

The stock of salt at the 33 yards at the beginning of the year was 53,323 maunds and at its close 55,368 maunds.

Some fishermen of Boria, Jaigad, Varoda, Kalbadevi, Ratnagiri, Manki and Murdeshwar yards availed themselves of the concession of taking duty-free salt from their respective fish curing yards to preserve their catch at sea. The quantity of salt issued for the purpose was 496 maunds in the Ratnagiri district and 40 maunds in the Kanara district as against 645 maunds in the previous year in the two districts.

About 1,372 maunds of salt was issued to agriculturists free of duty from the fish curing yards for manurial purposes as against 745 maunds in the previous year. Issue price of denatured salt for manurial purposes was eight annas per maund up to the close of the year.

128. **Training in fish curing methods.**—The training of the yard officers in the improved methods of curing fish at the model sheds under the supervision of the master curers was continued and the yard officers at Achra and Mobar in the Ratnagiri district and Chendia and Gangavali in the Kanara District received training during the year. Out of the eleven yard officers trained in the past years, seven yard officers left this department to improve their prospects.

129. **Model fish curing sheds.**—The fish curing demonstrations at the two model sheds proved increasingly attractive. During the year 60 fish curers cured 14,22,200 mackerel by wet as well as by dry methods at the Majali model shed. At Malvan 9 fish curers cured 1,410 maunds of mackerel, 445 maunds of wagali, 338 maunds of seer, 35 maunds of shingala, 72 maunds of dhodi and 10 maunds of karmat by wet as well as by dry methods. Both the model sheds were thus almost exclusively used by the fish curers for curing fish.

At the Majali model shed about 78,000 mackerel were cured by the dry as wel as wet methods departmentally and the total expenditure incurred was Rs. 304 as against Rs. 192-6-7 in the previous year, and the sale of fish realised Rs. 465-6-0.

At the Malvan Model shed, 12,000 mackerel and 400 other fish, such as ghol, saranga, mushi, shingala and surmai, etc., were cured by dry as well as by wet methods departmentally and the total expenditure incurred was Rs. 350-11-9, as against Rs. 221-12-1 in the previous year, and the sale of fish realised Rs. 312-4-0. This does not include the price of fish sent for exhibition and that of fish meal.

The construction of 24 cement concrete platforms at the Ratnagiri yard was completed during the year and they will be thrown open for curing fish during the ensuing fishing season. Construction of similar sets of platforms was taken up by the Public Works Department both at Malvan and Harwada, but the work could not be completed before the close of the present financial year owing to labour difficulties.

130. **Smoke House.**—The need for a suitable substitute for fresh and canned fish, in view of the urgent demand from both the civilian and military population, raised the question of the possibility of the use of smoked fish. The problem was taken in hand by this department, which improvised a smoke house at Malvan. Supplies of fish smoked here met with the approval of the military authorities. Their encouraging report led to the submission of a scheme to Government by this department, which drew up a proposal for the establishment of smoke houses at various important fishing centres.

Other improvements at the Yards.

131. (i) **Jaigad Yard.**—Additional measures of protection against the menace of erosion were adopted by the use of rubble and by the extension and heightening of the present embankment. The total cost of the work amounted to Rs. 825.

(ii) **Majali yard.**—The work of constructing a new salt kothar which was commenced in the previous year, was completed during the year by the Public Works Department at Karwar.

(iii) **Bingi yard.**—Construction of a new salt kothar at a total cost of Rs. 12,535 was taken up during the current year by the Executive Engineer, Kanara Division, Karwar.

(iv) **Chendia yard.**—Similarly, administrative approval for the construction of a salt kothar at Chendia at a revised estimate of Rs. 10,723 was granted by Government. As, in the meanwhile, the prices of the building material increased, the sanctioned estimate had to be revised to Rs. 17,500.

(v) **Harwada yard.**—The work of constructing a new salt kothar at Harwada yard was completed during the year and was ready for the storage of salt.

(vi) **Keni Yard.**—A semi-permanent kothar was put up at the Keni yard at a cost of Rs. 534 and is being used for storing salt.

The quarters for two peons were completed during the year and the same were occupied by them.

Damages to Yards.

132. (i) **Kalbadevi Yard.**—Erosion of land by tidal action at the Kalbadevi yard continued during the year.

(ii) **Mithbao yard.**—A cyclone swept the Ratnagiri coast in May, 1943. The damage caused was the collapse of a portion of the peons' quarters at the Mithbao yard.

The cudjan thatch work of the roof of the salt kothar was also partly blown off during the cyclone and the leakage of rain water led to the destruction of 176 maunds of salt.

(iii) **Mobar yard.**—The temporary shed built to house the two peons at the Mobar yard was blown away during the cyclone of May 1943 and it was re-erected immediately at a cost of Rs. 68.

(iv) **Harwada yard.**—In one of the rooms of the peons' quarters of the Salt Department situated close to the Harwada Yard, fire broke out accidentally and as a result, the peons' quarters, the old salt kothar and a peons' shed were burnt down to ashes. There was however no loss of life and damage to Government property was slight.

(v) **Keni yard.**—Owing to untimely rain in May 1943, there was heavy leakage in the roof of the old salt kothar as a result of which a deficiency of 184 maunds occurred on clearance of two heaps of salt in this yard.

(vi) **Kumta yard.**—As there was heavy rainfall in May, the staff quarters at the Kumta yard collapsed due to leakage in the grass thatched roof. The staff had to be accommodated in the office building. A sum of Rs. 364 was placed at the disposal of the Executive Engineer, Kanara Division, Karwar, for renewing the quarters.

(vii) **Manki yard.**—A portion of the stone wall of the compound fencing at the Manki yard collapsed during the heavy rains in May 1943. It was repaired at a cost of Rs. 75.

133. **Glazed Pots for curing fish.**—Curing of fish in stoneware jars was continued at six fish curing yards as in the previous years.

134. **Lighting facilities at important yards.**—Despite scarcity of kerosene oil lighting of petromax lamps at the important yards for three months from October to December was continued during the year through the active co-operation of the District Magistrates of the two districts.

Opening of new yards.

135. (i) **Mirkarwada.**—All the structures viz., a salt kothar, compound wall and six cement concrete platforms, were constructed at the close of the previous year. The Mirkarwada foreshore is quite useful for rampan fishing and six rampans operated during the year. The sales of salt at the yard were very brisk and 1,069 maunds of salt were issued for curing fish. The sales of salt at this yard would have been much higher but for naval restrictions on fishing.

(ii) **Paj.**—The question of establishment of a yard at Paj was postponed till after the war, as, the fishermen stated that they would not be able to guarantee a consumption of one thousand maunds of salt, as some fishing boats could not put out to sea for want of sufficient crew. Several ablebodied youths from Paj have either entered the army or the navy, while an equally large number is believed to have sought lucrative employment in Bombay.

(iii) **Palshet.**—The request of the fishermen for a yard was carefully considered and Government were approached for permission to establish a yard at Palshet immediately.

136. **Co-operative Societies.**—The Fish Curing Yards Establishment Co-operative Credit Society Limited, Ratnagiri, continued to do good work under the chairmanship of the Inspector of Fisheries. At the close of the year there were 90 members on its roll, the amount of subscription was Rs. 411-8-0 with a paid-up share capital of Rs. 3,900.

Out of an aggregate loan of Rs. 3,075 granted during the year, Rs. 2,629 were received in time. The Society holds Defence Bonds of the value of Rs. 300.

Fishermen's Co-operative Credit Societies at Karla (Ratnagiri), Majali, Karwar and Bingi functioned as mere credit societies.

Muslim fishermen of Rajiwada raised initial capital by voluntary subscription with a view to organising a co-operative society. They applied to the Assistant Registrar, Co-operative Societies, for registration. The matter is receiving the attention of the authorities. Similarly, the application for registration of a society organised by the fishermen of Sakri-Nata (Jaitapur) is under the consideration of the officers of the co-operative department.

137. **Rural Development Activities.**—The Fisheries Inspector attended the meetings of the Rural Development Board convened by the Collector of Ratnagiri, where rural development and other allied matters were considered.

138. **Grow More Food Campaign.**—Agriculturists were advised to use denatured salt which is issued from the fish curing yards at a concession rate. The denatured salt is very useful for this purpose as its principal ingredients are salt and bone dust. During the year under report 1,372 maunds of denatured salt were issued to the agriculturists from the various yards in the two districts of Ratnagiri and Kanara as against 745 maunds in the previous year.

Rye (Nachani) was grown at the Boria and Shiroda fish curing yards and vegetables at other yards by the yard establishment.

139. **Loans and subsidies.**—The fisherman youth of Ratnagiri who was granted a loan of Rs. 300 free of interest, in the previous year repaid the entire loan and again applied for a fresh loan of Rs. 700 for the extension of shark liver oil extraction. He was granted a subsidy of Rs. 250 and a loan of Rs. 450 free of interest for the purpose.

Of the nine fishermen of Karla (Ratnagiri) who were granted a loan of Rs. 200 at 5½ per cent. interest in the previous year, one person repaid the entire amount of the loan during the current year and the other eight persons paid the instalments regularly.

One fisherman youth of Chendia who was granted a loan of Rs. 200 free of interest for curing fish by improved methods taught to him at the Majali Model Shed, continued to pay the instalments regularly.

Applications for loan for the purchase of rampan nets from several fishermen in the district of Ratnagiri and Kanara are under consideration of the Department.

140. **Industrial Exhibition.**—The display of fishery products furnished one of the items of the "Farmer's Week" organised by the Collector of Ratnagiri at Shirgaon Agricultural Farm. The exhibits attracted the attention of visitors in view of their novel character. Some of the models and charts from the Fisheries Schools were also included in the exhibits.

At the "Fancy Fair and Handicraft Exhibition" organised in aid of the Church of Our Lady of Piety, Karwar, several articles of interest from the Karwar Fisheries School were kept for show.

141. **Manufacture of Shark Liver Oil.**—Oil was extracted at Ratnagiri, Jaitapur and Malvan centres in the Ratnagiri district. During the year about 2,500 lbs. of oil was sent from the three centres to the Director of Industries, Bombay, for disposal.

142. **Cold Storage Facilities.**—The two ice factories at Malvan in the Ratnagiri district and Chendia in the Kanara district continued to do good business throughout the year. The provision of facilities for the transport of fish preserved in ice from

these places to Kolhapur, Sawantwadi, Belgaum, Dharwar and Hubli proved to be a welcome innovation of which the fishermen were not slow to take advantage.

143. **Fisheries Schools.**—The two Fisheries Schools at Ratnagiri and Karwar established in the previous year, functioned efficiently during the year. The Inspector of Fisheries, Ratnagiri, conducted the annual examination and the standard of proficiency gained by the boys was most encouraging. One more class **viz.**, sixth standard was added and at the end of the year there were 112 and 85 boys respectively, on the rolls in the two schools.

Applications were received from prominent fishermen of Ratnagiri and Karwar acknowledging the good the two schools were doing to their boys. The signatories to the applications further requested that some such education should also be provided for their girls. As an experimental measure provision was made for the admission of girls under 15 subject to a maximum of 75. Provision was also made for teaching English to V and VI standards on the condition that the pupils provided themselves at their own expense with the necessary English text books.

144. **Inspection.**—The Inspector of Fisheries, Ratnagiri, was out on tour of Inspection of the yards in the districts of Ratnagiri and Kanara for 123 days. On his visits he addressed several meetings of fishermen and discussed with them the difficulties experienced by them on account of the war. The Inspector also continued to render assistance to the Registrar of Co-operative Societies in organising societies for improving the lot of fishermen and their trade.

145. **Issue Price of Salt.**—The issue price of salt to fish curers was Rs. 1-1-0 per maund and the same was raised to Rs. 1-4-0 on account of the war.

ANNUAL REPORT OF THE SHARK LIVER OIL SCHEME FOR THE YEAR 1943-44.

146. Further progress was recorded during the year in the experiment to extract oil from shark livers. The output was 2,000 gallons of neat oil, as compared with 1,000 gallons in the previous year and 400 gallons in 1941. The final figure of production must be yet larger as the figure does not include the quantity of oil disposed of directly by the fishermen, without the medium of this department. The quantity of vitaminised oil made available in this province during the year may be roughly estimated at 200,000 lbs. worth about Rs. 3,00,000, as against 68,000 lbs. worth Rs. 1,02,000 in 1942.

This department was instrumental in securing execution, through a local pharmaceutical frm, of an order from the Government of India for the supply of 76,000 lbs. of Oleum vitaminatum. The firm was supplied with neat shark oil by this department to enable it to meet the requirements of the order.

The growing popularity of shark liver oil with the public is evidenced by the fact that no fewer than 100 samples of neat and diluted oils were consigned to this department by the trade for their vitamin A analysis. A number of samples were

also received from Sind for the purpose. The demand for this type of analytical work is on the upward grade.

Apart from oil thus sent for analysis, this department itself bought from various local dealers oil put up for sale in order to ascertain whether the bottled product actually came up to what was claimed for it in the labels on the bottle. Careful analysis showed that the bottled product in many instances fell far short of the advertised potency. The oil was not always in conformity with the minimum requirements of the B. P. Standard, it having been over diluted. Dealers were informed of the results and were told to be careful. This step was deemed essential if the shark oil industry was to retain its position in the market after the war, when other products from abroad would be available at competitive rates.

With a view to ensure that shark liver oil of an identical standard quality is available for sale to the public, the question of undertaking the manufacture, refining, standardising and sale of shark liver oil under a central agency is under consideration.

Numerous enquiries were addressed from various places in this province to the department for details of the manufacturing process employed in the shark liver oil. The inquiries were duly answered. The department felt that further enterprise on the subject would be stimulated if a brochure containing all the relevant information was readily available. The department, accordingly brought out a brochure entitled "Manufacture of shark liver oil" in English. A Marathi version of it is in the press and will soon be available for sale.

The progress of the shark liver oil industry is bound up with the availability of a regular and copious supply of shark livers. This presupposes that catches are as plentiful as possible. Recent experience shows that great scope exists for shark fishing if only a power propelled vessel was available. Difficulty is, meanwhile, being experienced by fishermen in the matter of hooks which are not now available from abroad. The department, accordingly, is investigating the possibilities of the manufacture of hooks on a large scale, to be supplied to fishermen at the lowest rate possible. The Controller of Steel has been addressed for the release of the necessary quantity of steel.

A new oil extraction centre was opened at Satpati, a fishing village in the Thana District. With the addition of this centre, medicinal oil is now extracted at eight different centres along the coast, these being Bombay (Sassoon dock, Worli and Danda), Karanja, Bassein, Satpati, Ratnagiri, Jaitapur, Deogad and Malwan.

Research work on the life histories of sharks, skates and rays was continued during the year and the following papers on the subject of sharks and shark liver oils published in the journals mentioned against their names :—

(i) Tiger Shark—Galeocerdo tigrinus Feeding and Breeding habits.	Jour. Bom. Nat. Hist. Soc. Vol. 34, Aug. 1943.
(ii) Physical and Chemical Properties of some Indian Shark Liver Oils.	Jour. Ind. Chem. Soc. Ind. and News Edn. Nos. and 4. Vol. VI, 1943.

(iii) Differential yield and Vitamin A content of Shark Liver Oil in relation to variations in methods of extraction and other biological factors.	Under compilation.
(iv) Nutritive values of some marine fishes of Bombay.	Ind. Jour. Med. Res. (in press).

FRESH WATER FISHERIES.

147. Much progress could not be made with the development of fresh water fisheries during the year on account of difficulty of obtaining fry, which in the past was obtained from Bihar and Madras, as all these provinces were themselves concentrating on conservation of their own resources with a view to the development of their inland fisheries. One of the obstacles in the way of the extension of the work is the difficulty of railway transport, which has prevented the importation of fry from other provinces.

The difficulties may be illustrated by the following instances :

A consignment of 30,000 fry was ordered from Patna but only 10,000 fry were despatched. Out of these 10,000 fry only 1,100 survived and were used for stocking.

The prospect of the establishment of sources of supply of fry in our province was examined during the year, and collection from rivers in the Ahmedabad district was accordingly made. The fry were mixed and hence, it was not possible to determine their species. The fry were not used for stocking since if they contained predaceous fish, they would be later on a menace to other fish. Instead of fry, fingerlings were next collected as there was a more assured prospect of determining the species, and thus differentiating the sheep from the goats. Only 200 fingerlings of catla were collected, all being obtained from the reaches of the Bokh reservoir at Prantij. More could not be collected on account of floods. Observations show that the Bokh reservoir is likely to be a fertile source of supply and accordingly investigations will be carried out in the following year to discover whether larger collections are possible.

148. **Stocking of permanent waters.**—About 500 Rohu and Mirgal brought from Patna and fattened in the Bandra Pond were introduced in the Ulhas river near Badlapur. The remaining fish were netted departmentally in March 1944 and the catch was disposed off for Rs. 65. About 200 catla fingerlings brought from Prantij were also liberated in the Ulhas river. About 70 fingerlings of gourami from the Bandra tank were liberated in the same river for breeding.

Fingerlings of etroplus could not be brought from Karwar owing to the uncertainty of the arrival of the launches, which were frequently laid up with engine trouble.

149. **Fish Fattening Experiments.**—Carp fry introduced in the Bandra pond in July 1942 were netted in March 1944, when 120 Rohu, 134 Catla and 450 Mirgal were removed. The entire quantity of fish weighed 4,000 lb. and was disposed off for Rs. 1,260. Rohu had grown to 9—10 lb. in weight, 17½″ in girth and 20″ in standard

length ; Catla 6—7 lb. in weight, $16\frac{1}{2}''$ in girth and $17\frac{1}{2}''$ in length and Mirgal 3 lb. in weight, $11''$ in girth and $17\frac{1}{4}''$ in length.

150. **Gourami.**—Gourami in the Bandra tank are thriving and breeding very satisfactorily. Numerous fingerlings are seen on the borders of the tank. The work of distribution of gourami to permanent waters was again resumed during the year. Ulhas river, Tulsi tank, Talegaon tank and Bhiwandi tank were again stocked with 70, 80, 35 and 40 fingerlings respectively. Gourami in the Victoria Gardens pond are breeding satisfactorily.

Five dozen fingerlings were supplied to the Bhavnagar state at Rs. 15 per dozen. A consignment of three dozen fingerlings was supplied to an Army Medical Training Centre for growing them in their ponds, and about 200 fingerlings to the Bombay Municipality for introducing in the Vihar lake.

The total amount realised from the sale of fish fattened in our ponds was Rs. 1,595.

151. **Other activities.**—The department received a number of querries for the supply of Gambusia (anti-malarial fish). A successful attempt to breed the fish was made in a pond at Bandra, and the fish was given to the Bandra Municipality as well as to some military centres near Bombay.

The Collector of Salt Revenue and Central Excises requested the department to recommend larvicidal fish suitable for combating malaria in sheets of water adjoining salt works. A few species of Aplocheilus lineatus (McClld.) were, theretore, collected for him. An officer of the Salt Department who was specially deputed was given instructions in the identification and collection of the fish.

A detailed study of the breeding habits and development of some fresh water fish of Bombay Suburban District was made during the year.

A paper on the breeding habits and early stages of Gourami was published in the journal of the Bombay Natural History Society, volume 44, December 1943.

A paper on fish and Fisheries of Ahmedabad has been accepted for publication in the same journal mentioned above.

CHAPTER XVI.

THE CENTRAL STORES PURCHASE SECTION.

152. During the year under review purchases totalling about Rs. 14,19,733 were made by this Organisation on behalf of the various Departments.—

(1) Textiles (including yarn).

(2) Leather.

(3) Stationery.

(4) Electric bulbs.

(5) Chemicals including apparatuses.

(6) Machinery, hardware, tools, etc.
(7) Press articles.
(8) Bicycles.
(9) Sports articles.
(10) Paints, varnishes, oils and allied stores.
(11) Miscellaneous and sundry articles including furniture.

The details of the purchases stated above are tabulated below :—

Description.	Manufactured on handlooms.	Manufactured in this Province.	Manufactured in other Provinces.	Imported.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Textiles	24,105 9 9	31,242 9 0	14,885 12 0	300 0 0
Yarn	....	323,704 11 0	....	....
2. Leather	....	....	69 8 0	....
3. Stationery	....	6,770 1 5	7,825 3 1	4,206 5 4
4. Electric bulbs	....	....	9,033 4 0	2,267 12 0
5. Chemicals	....	9,777 14 0	1,770 7 0	33,046 3 6
6. Machinery, etc.	....	26,510 9 0	468 5 0	27,143 0 4
7. Press articles	....	30,315 6 3	1,277 0 0	10,492 0 0
8. Bicycles	....	....	....	240 0 0
9. Sports articles	....	3,804 8 0	762 0 0	....
10. Paints, oils, etc.	....	25,801 6 0	2,018 9 0	965 3 6
11. Miscellaneous	....	74,209 8 8	11,356 11 0	3,951 10 0

In addition to the purchases indicated above, tenders were invited and contracts fixed for textiles, packing cases, leather, drawing articles, stationery, straw boards, time pieces and clocks, peons badges, brass seals, etc. on behalf of the Superintendent, Government Printing and Stationery, Bombay, required for the financial year 1944-45. Figures for the year 1943-44 will be found at page 62 of the last year's report. Contracts were also fixed for stitching peons' uniforms, leather for the Inspector General of Prisons, phenyle for the D. D. Chawls, etc.

Description.	Manufactured in Bombay Province.			Manufactured in other Provinces.		Imported.
	Handloom.	Handmade.	Machine made.	Handmade.	Machine made.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
1. Textiles ..	67,688 10 0	51,212 8 0	1,99,751 8 4	....	....	....
2. Stationery ..	....	6,106 14 0	1,55,666 9 3	....	59,458 1 0	25,000 0 0
3. Drawing ..	....	....	1,848 12 0	....	1,654 9 0	49,640 7 8
4. Leather ..	....	16,988 14 6	....	....	....	....
5. Packing cases	....	62,968 12 0	....	....	....	....
6. Straw boards	....	11,990 0 0	....	....	....	....
7. Clocks ..	....	....	2,025 0 0	....	....	....
8. Phenyle ..	....	....	5,310 0 0	....	....	....
	67,688 10 0	1,49,267 0 6	3,64,601 13 7	....	61,112 10 0	74,640 7 8

The details of some of the important orders placed are indicated below :—

Textiles (including yarn).—

	Rs.	a.	p.
Cloth.—			
Dungry	27,500	0	0
Mulmul	12,411	7	4
Longcloth	10,506	4	0
Jaconette	6,817	11	4
Gunny	3,755	3	4
Kamblis	4,400	0	0
Threads and twines, etc.	4,550	8	0
Tapes	2,955	12	6
Umbrellas	51,212	8	0
Packing cases	62,968	12	0
Clocks	2,025	0	0
Straw-boards	11,990	0	0
Bicycles	6,000	0	0
Phenyle	5,310	0	0
Yarn	3,23,704	11	0
Chemicals	44,594	8	6
Ghamellas	15,707	10	0
Paints, oils and allied stores..	28,785	2	6
Electric bulbs	11,301	0	0
Press articles	42,084	6	3
Sports articles	4,566	8	0

Purchases were also made on behalf of local bodies in accordance with the orders of Government.

153. **Inspection.**—Orders were issued by Government to the effect that the services of the technical staff of other Departments of Government should be utilised by the Stores Purchasing Officer to the fullest extent for the purposes of inspection of stores for quality, standard and specification, etc. Heads of various Departments were requested to render all possible assistance to the Stores Purchasing Officer in this respect. The Executive Engineer, Presidency Division, Bombay, was in the meanwhile kind enough to place at the disposal of this Department the services of his supervisors for the inspection of stores required by the various Executive Engineers in the districts. In absence, however, of any inspectorial staff with the Stores Purchase Organisation, considerable inconvenience has been felt in examining all the stores. In some cases the contracting firms were good enough to agree to get these stores examined by the consignee at the destination, though in other cases certain firms refused to execute the contracts. Inspection was carried out as far as feasible by the technical staff attached to the Department of Industries but otherwise by the consignees.

154. **General.**—Owing to the acute shortage of electric bulbs in the market, the requirements of all the Departments were consolidated and a single indent was placed with the Chief Controller of Production (Munitions), Calcutta, for the supply of lamps of different wattages. Due to the limited import of electric bulbs and

manufacture of the same in India, it has been necessary for the Government of India to allot quotas to various Provincial Governments in accordance with the total number of lamps available, paying due consideration to the requirements for civilian purposes. Supply of over one-third of the consolidated indent has been received from the Chief Controller of Production (Munitions), and further allotments are expected during the next few months.

A number of references received from Government for advice and proposals to purchase the various stores from different departments were attended to. Indents were also received from different Departments for stores under control. Though some of the indents were very urgent it was found difficult to comply with them in time as release orders were required to be obtained from the appropriate departments of the Government of India controlling such stores.

Government were also pleased to issue orders exempting certain stores from the purview of the Central Stores Purchase Organisation. To meet the emergent requirements the heads of various Departments were authorised to purchase up to a maximum of Rs. 500 per annum, and the Stores Purchase Officer was delegated power to authorise the indentors to purchase such stores locally as in his opinion can be more advantageously and economically purchased by them.

Even after the issue of the above Government Resolution, indents are not being received by the Stores Purchase Organisation regularly from all the Departments. It appears that some Departments are still purchasing stores direct without reference to the Stores Purchase Organisation with the result that it is not possible even at present to consolidate indents for articles of same type required by the various Departments and place bulk orders with a view to secure stores economically or to reduce to a minimum and standardise stores required in common by more than one Department.

Government were pleased to issue instructions authorising the Stores Purchase Officer to purchase handloom textiles in preference to mill-made cloth by giving price preference up to a maximum of 10 per cent. for handloom products, in accordance with the general policy of encouraging the Handloom Industry.

Difficulties were experienced in locating the sources of supplies and also in inducing the suppliers to stick to the delivery periods. Delivery at destination was delayed in some cases due to the transport difficulties. Priorities for certain classes of stores were obtained through the Board of Transport.

CHAPTER XVII.

COMMERCIAL AND INDUSTRIAL INTELLIGENCE SECTION.

155. The year 1943-44 was a year of scarcity and controls. At the beginning prices of consumers goods particularly cloth and imported articles, were spiralling and hectic activity was a feature of the Stock Exchange. Early in April, 1943, the Government of India brought into existence the Department of Industries and Civil Supplies, New Delhi, to control the situation and give some relief to the hard-pressed consumers. Beginning with cotton textiles, the new Department introduced one control measure after another and as the year progressed the controls became more comprehensive and were tightened. The average businessman and industrialist, not familiar with such restrictive measures, found himself confused and in need of assistance. Great difficulties were also experienced in getting machinery, spares and essential raw-materials. The heavy strain under which the transport system of the country was working, complicated the situation still further.

It is against this background that the activities of the Commercial and Industrial Intelligence Section during the year has to be viewed. The acute scarcity of industrial raw materials, particularly the imported ones, led to diverse enquiries about substitute articles. Similarly, the non-availability of machinery and spares made the manufacturers turn to local fabricating establishments and frequent requests were made to the Section to contact the same. The difficulties of transport led the Regional Transport Board, Bombay, many a time to solicit the assistance of this Department to recommend transport priorities and exhaustive investigations had to be carried out expeditiously by this Section for the purpose. A feature worth special mention is the big increase in the number of dispute cases. Due to a continuous rise in the price level, tightening of exchange control and a difficult shipping position, a large number of the exporters of this Province could not keep their engagements with their foreign constituents who, in their turn, took up the matter with the Indian Government Trade Commissioners in the respective areas. With a view to maintain the fair name of the traders and to promote trade relations between this country and outside centres, the Director of Commercial Intelligence, Calcutta, to whom the disputes were referred to by the Trade Commissioners, requested the good offices of this Department for settling the disputes amicably and this section had to deal with these delicate and often thankless tasks. In addition to these, the Section carried out during the year a number of special investigations for the Supply Department of the Government of India.

Though the Government had given administrative sanction to the appointment of additional staff last year, it was found difficult to get suitable candidates and some of the posts were held in abeyance. The Section worked very much short handed during the year.

156. Apart from the additional work devolved as a result of War developments, the Section carried out its normal duties which are detailed below:—

(1) It collects and disseminates industrial and commercial information to the public and maintains such information in properly indexed files.

(2) It collects statistics and other information regarding production of industrial concerns in the Bombay Province.

(3) It collects and supplies statistics and other information regarding the movement of internal and overseas trade.

(4) It is preparing an authoritative Commercial Directory for the Bombay Province.

(5) It finds out sources, actual as well as potential, of raw materials, their prices and other incidental expenses, e.g., cost of transport.

(6) It studies actual as well as potential markets for the industrial products of the Bombay Province and the movement of products and the agencies and channels through which it takes place.

(7) It studies freight rates fixed by the Railways, as amended from time to time and the Octroi and terminal taxes imposed by the local bodies, to enable the Department of Industries to make representations where necessary, in the interest of industry or trade concerned likely to be adversely affected.

(8) It makes available to the public information regarding patents, trade marks, etc.

(9) It is reorganising on modern lines, the Technical and Commercial Library and Reading Room of the Department of Industries.

157. In the original plan submitted to the Director, it was intended to organise the work of the Section in six divisions viz. (1) Commercial and Industrial Intelligence Division, (2) Statistical Division, (3) Research Division, (4) Industrial Survey Division, (5) Library Division and (6) General Division. Due to the paucity of staff, however, the Industrial Survey Division and the General Division could not be organised and the work of these two divisions continued to be handled by the remaining Divisions. A short account of the work done by the different divisions is given below :—

I. COMMERCIAL AND INDUSTRIAL INTELLIGENCE DIVISION.

158. The Commercial and Industrial Intelligence Division is engaged in collecting, collating and disseminating useful commercial and industrial intelligence, with a view to assist the orderly progress of the industries of the Province. As in previous years, it continued to study all available literature relating to industries and commerce of the Province published by the Central and Provincial Governments and the different Chambers of Commerce. Information has also been gathered from the available commercial and technical journals of the country. All pertinent information has been maintained in indexed files. The Division had also to pay a good deal of attention during the year to the multiplicity of control orders issued by the Department of Industries and Civil Supplies, New Delhi. Requests were frequent about the exact nature of the restrictions imposed and the authority vested with the control orders. Due to prolongation of the war and scarcity of essential raw materials in the Province, special efforts were made to get into touch with the Directors of Industries of the different Provinces and States with a view in particular to exchange information of value to the industrialists. It was found that by this means some factories which would have been otherwise forced to close down were enabled to proceed with their normal activities. Another activity of the Division worth special mention was the preparation of a list of factories capable of undertaking fabrication work for the industrialists of the Province. This was found to be of great service as the non-availability of spares and machine parts has put a heavy strain on the existing equipment. Work of preparation of card indices of manufacturers and dealers in the Province made further progress.

The number and type of enquiries from the businessmen and industrialists of other Provinces and States dealt with by the Division showed material improvement. Most of the enquiries related to raw materials and machinery manufacturers and/or dealers

in the Province. Wherever possible the information was supplied through the Directors of Industries of the respective Provinces and States.

The great scarcity of consumers goods in the Middle and Near Eastern Countries led to a large number of enquiries being made for such goods from this Province. The Director of Commercial Intelligence, Calcutta, to whom the enquiries were first addressed by the parties was supplied the information desired by him. In many instances, reports about the financial standing of the firms had to be secured and forwarded to the Director. All these credit investigation reports have been recorded in the Bank Reference Register. But the most delicate work handled by the Division and the one which showed a heavy increase during the year, related to disputes arising from the non-fulfilment of the contracts entered into by the industrialists and traders of this Province with outside dealers, particularly from Australia and Palestine. A good deal of tact had to be exercised and every effort was made to settle the matters amicably. In many cases, the good offices of the Section served to solve knotty problems with satisfaction to both parties. The Director of Commercial Intelligence has on many occasions expressed the indebtedness of his office to this Section for its expeditious and cautious handling of the disputes cases.

159. The total number of enquiries received and dealt with by the Division during the year was 1,667 as against 1,418 in the previous year. The following grouping of these inquiries according to their nature and the sources from which they came may be found interesting :—

Sources of Inquiries.

From :—

(1) The Commercial and Industrial Community of Bombay ..	887
(2) Department of Bombay Government	89
(3) Inter-Provincial Inquiries :—	
(*a*) The public of other provinces	303
(*b*) Provincial Governments	95
(4) The Government of India	231
(5) Outside India	62
Total ..	1,667

Types of Inquiries.

(*a*) Commercial	313
(*b*) Large and Organised Industries	256
(*c*) Small and Medium-sized Industries	427
(*d*) Cottage Industries	89
(*e*) Miscellaneous	582
Total ..	1,667

It will be noted that there was an appreciable increase in the number of enquiries received from small and medium-sized industries. This was in part due to the peculiar problems they had to face in getting their requirements in an atmosphere of all round shortages. The Division has continued to give its attention to make its work more useful to the cottage workers of the Province.

In addition to the above, a number of people saw the Officer-in-Charge of the Section to get the information wanted by them. Many people were anxious to get as much data as possible to plan new ventures in post-war years either in industries or in business. They were supplied with the necessary information. The work done by the Section on the scope for new industries in the Province in post-war years was freely placed at the disposal of the public.

Typical enquiries received by the Division during the year are summarised at the end of this Report.

160. **Commercial Directory.**—The Commercial Directory projected by the Section is divided into two parts (1) Part I deals with commercial, industrial, financial and statistical information about the industries and trade of the Province, (2) Part II is the Directory. For a Section of part I, it is proposed to enlist the co-operation of well-known businessmen and captains of industry of the Province whose contributions are likely to enhance the utility of the Directory.

The work in connection with the Directory made material advance during the year. Comprehensive information was collected about the dealers and manufacturers of Bombay City and the three Districts of Nasik, Surat and Belgaum, where the Department has its District Industrial Officers. Steps were also taken to collect similar information about the remaining districts. The information relating particularly to the Directory part will have to be very carefully checked just before publishing the document, as any discrepancies of wrong statements are likely to detract from its usefulness. It is hoped to undertake this work with the assistance of the Investigators appointed in connection with the work of the Census of Industrial Production in the Province. The Commercial and Industrial Intelligence Division collected substantial material during the year for Part I of the Directory. It is hoped to publish the Directory early.

II. STATISTICAL DIVISION.

161. The main work of this Division during the year related to the organization of the Census of Industrial Production, the objects of which were detailed at some lengths in the previous reports. Early in April, 1943, Government directed by Notification No. 4190/33(*a*) issued under Section 3 (1) (*a*) of the Industrial Statistics Act, 1942 (Act XIX of 1942) that statistics shall be collected relating to all matters connected with the production of any articles or things in factories in the Province of Bombay. Under Section 4 of the Act, the Director of Industries, Bombay, was also appointed the Statistics Authority for the entire Province. Thereafter steps were taken to contact the industrialists, businessmen, economists, etc., to get their co-operation in the planning of and carrying out the work of the Census systematically and expeditiously. It has always been the ambition of this Section to carry out this unique experiment in the history of the country with the utmost co-operation of the public and not to rely on mere legal powers. The response received from those consulted was very encouraging. The Department takes this opportunity to thank all those who so generously assisted it in the matter. The Form according to which statistics are to be collected under the Act which was finally prepared by the Division was forwarded by Government to the Government of India for information as the original Act was passed by that Government. Matters were

delayed for some time as the Government of India wanted to consult the other Provincial Governments with a view to ensure uniformity in the collection of statistics under the Act. As soon as permission to proceed with the work was received from the Government of India, the Section forwarded to Government the Form prepared by it for publication in the Gazette for receiving objections or suggestions as required by sub-section (1) of section 12 of the Industrial Statistics Act. After considering the objections or suggestions received, Government by notification in the Gazette Extraordinary dated 31st March, 1944, framed the Rule under the Act prescribing the exact Form according to which industrial statistics will be collected annually for the entire Province.

In addition to the above, the Division as usual collected available statistics relating to industries and general economic conditions in the Province. The tabular statement showing the progress of the industries of the Province year by year referred to in the last year's Annual Report was brought up-to-date. Special investigations were also carried out on many occasions to supply statistical data requested by the Supply Department of the Government of India. The work of collecting detailed statistics wanted by the Department in connection with post-war reconstruction had to be done by this Division. The most thankless task and the one which was bristling with difficulties, however, related to the estimation of costs of production of articles which the Provincial Government wanted to control in the interests of the consumers of the Province. It is pleasing to note that most of the recommendations of this Department in this connection were accepted by Government.

III. RESEARCH DIVISION.

162. Apart from carrying out the usual duties of (1) preparing a memorandum on the sources of raw materials existing in the Province and of their prices and (2) finding out the ways and means and the markets for the industrial products of the Province, the movement of such products and their final destination, the staff of this Division had to bear the heavy strain resulting from war and allied activities. Requests were many for information about raw-materials available in this Province in sufficient quantities and which could take the place of scarce materials. Industrialists anxious to prepare plans for post-war reconstruction had to be supplied with detailed notes about the present position and future possibilities of specific industries mentioned by them. The Division had also to collect information on numerous industries of the Province for the Editor, Dictionary of Raw Materials and Economic Products of India planned by the Board of Scientific and Industrial Research, New Delhi. Since many of the industries for which information was sought were minor and unorganised industries, a number of hurdles had to be surmounted, as information to be of any value for the purposes of the Dictionary had to be up-to-date and authoritative. Another type of work which mainly owes its origin to the war related to investigations undertaken on behalf of the Regional Transport Board, Bombay. The scarcity of raw materials in the Province and in particular the heavy pressure on the transport system led to the institution of a system of transport priorities and the good offices of this Department were solicited by the Regional Transport Board, Bombay, for investigating a number of disputed cases. The Division had also to look after the general work of the Section as due to the paucity of staff the General Division originally planned for could not be organised.

Below is given a list of the Departmental Reports prepared by the Division since its inception :—

(1) Organization of the Commercial and Industrial Intelligence Section.

(2) Census of Industrial Production papers including the following administrative notes.

(a) Schedules 'A' and 'B' for Large and Small-scale organised industries with General Instructions for making return for the Census of Industrial Production in Bombay Province, 1943.

(b) Administrative Note on Draft Proposals for Census of Industrial Production in the Bombay Province.

(c) Administrative Note on the Census of Industrial Production in Surat, Nasik and Belgaum—District Industrial Officers' Districts.

(d) Questionnaire 'B' for small-scale and particularly cottage industries to be filled in by Investigators.

(3) Administrative Note on District Industrial Surveys—Specific and Territorial.

(4) Report on the Bell-metal Industry at Songir, West Khandesh, with special reference to the position of the industry in Bombay Province.

(5) Report on Groundnut Oil Production in Bombay Province and the estimated oil pressing capacity for Bombay City and Suburbs.

(6) Report on the Footwear Industry of the Bombay Province.

IV. COMMERCIAL AND TECHNICAL LIBRARY DIVISION.

163. The work of putting the Library on an organised basis was practically completed during the year. The catalogue was brought up-to-date and the card indices of all the books have been prepared. Rules regulating the use of the Commercial Library and Reading Room were framed and received the sanction of the Director. The purchase of books required by the different officers and subordinate institutions has been centralised to a considerable extent. The Library is organised on the lines of the Commercial Library and Reading Room of the Director of Commercial Intelligence, Calcutta. The public have been found to be making increasing use of the facilities afforded and there was more than a hundred per cent. increase in the number of visitors to the Library during the year.

About 230 new publications have been added to the Library during the year bringing the total number of books, Directories, etc., in the Library to 7,410. The Library also dealt with nearly 150 enquiries about technical books, journals, etc. Information particularly was sought about the manufacture of glass, bobbins and shuttles, pencil, casein, pottery, starch, bauxite, paper glue and plywood.

The following are the more important Indian and foreign magazines and other periodicals received in the Reading Room :—

Indian.

(1) Indian Textile Journal.
(2) Science and Culture.
(3) Commerce.
(4) Indian Finance.
(5) Indian Trade Journal.
(6) Quarterly Journal of the Board of Scientific and Industrial Research.
(7) Industry.
(8) Current Science.
(9) Textile Digest.
(10) Udyam.
(11) Monthly Survey of Business Conditions.

(12) Indian Print and Paper.
(13) Monthly statistics of the Production of certain selected industries.
(14) Accounts relating to sea-borne trade and navigation of India.
(15) Indian Co-operative Review.
(16) Bombay Co-operative Review.
(17) The Engineer.
(18) Labour Gazette.
(19) The Indian Concrete Journal.
(20) Monthly Statistics of Cotton Spinning and Weaving in Indian Mill

Foreign.

(1) Indian Trade and Engineering.
(2) Machinery.
(3) Chemical and Metallurgical Engineering.
(4) Dyer.
(5) Industrial Chemist.
(6) Modern Plastics.
(7) Food Industry.
(8) Toys and Novelties.
(9) Science News Letter.
(10) Wood.
(11) The Metal Industry.
(12) Economist.
(13) Iron and Steel Industry.
(14) Leather Trade Review.
(15) Shoe and Leather News.
(16) Popular Homecraft.
(17) Journal of the Council of th Scientific and Industrial Researc Australia.
(18) Perfumery and Essential O Review.
(19) Economic Geology.

164. **Typical inquiries received and dealt with by the Commercial an Industrial Intelligence Section during the year 1943-44.**

(1) **Paper Manufacture.**—A party had planned before the outbreak o hostilities a small paper mill at Bordi (District Thana). Owing to shortage o chemicals and other materials in the country they could not get the needed ra materials in adequate quantities. The Section took up the matter with the relevan authorities and the concern was enabled to get its requirements.

(2) **Gum Karaya Powder.**—A firm in Cape Town, South Africa, requeste the Director of Commercial Intelligence, Calcutta, to supply them informatio relating to Indian concerns milling gum karaya powder. When the matter wa referred to this department, exhaustive investigations were undertaken by thi Section and the desired information was forwarded to the Director.

(3) **Cottage Industries Sales Depots.**—The Director of Commerce an Industry, H. E. H. the Nizam's Government, Hyderabad, wrote to say that th Government contemplated the starting of Sales Depots at different centres i the State and at important towns of India to market their cottage industry product He requested detailed information relating to the line of work and the capita staff, equipment, etc., of the Sales Depots opened by the Bombay Government i Bombay City, Nasik, Surat and Belgaum. The information giving the particular asked for was transmitted to the Director.

(4) **Film Industry.**—Desirous of studying the possibilities of the film industr in the United Provinces as a post war industrial development measure, the Secretar to Government, Revenue Department, U. P., solicited detailed information regard ing the number of film studios, number of artists employed, capital invested, name of training centres, names of firms manufacturing and repairing cinema equipment etc., in this Province. The necessary information with available statistical detai was supplied to the Secretary after detailed investigations.

(5) **Dry Ice.**—The Director of Industries, Sind, desired information abou the present position of dry ice factories in Bombay Province. The informatio was collected and supplied to the Director.

(6) **Asbestos Industry.**—The Editor, Dictionary of Raw Materials, and Economic Products of India, Board of Scientific and Industrial Research, New Delhi, desired information regarding the present position and future possibilities of the asbestos industry with particular reference to the availability of suitable and sufficient raw materials in India. The necessary information was gathered from various sources and was supplied to him.

(7) **Transport Priorities.**—A dispute arose amongst members of the Groundnut Movement Advisory Panel, set up by the Local Government, about the grant of transport priorities for the movement of groundnut seeds to one of the members The matter was referred unofficially to this Department by the Board of Transport, Bombay. The Officer-in-Charge of the Section thoroughly investigated into the matter and made suitable recommendations to the Board.

(8) **Photographic Materials.**—The Chief Administrative Officer, Department of Supply, New Delhi, wanted a report about the bona fides of a certain firm manufacturing photographic materials, etc., in this Province together with recommendations about specific items for which the firm may be given Government contracts. The report giving full particulars about the financial standing of the firm with the recommendations of this Department was transmitted to the Officer.

(9) **Glass Industry.**—An Industrial Association of Ferozabad, U. P., had undertaken an exhaustive study of the glass industry of India with particular reference to modernizing the industry to meet the entire post-war requirements of the country. Requests were made to this Department to furnish them information relating to the Industry in this Province on the basis of a questionnaire form sent alongwith. The material was gathered and the Association was furnished the information through the Director of Industries, U. P.

(10) **Training in Automobile Engineering.**—A Himatnagar resident desired to be informed of institutions imparting training in motor driving and automobile engineering in Bombay City. A reference was made to the Deputy Commissioner of Police, Bombay, and the result communicated to the party.

(11) **Soldered Tin Cannisters.**—The Director of Commercial Intelligence, Calcutta, desired a few names of manufacturers of soldered tin cannisters. Enquiries were immediately conducted and the names and addresses of the factories communicated to the Director.

(12) **Provision Stores.**—A Bombay firm dealing in provision stores wanted to establish business connections with merchants in Ceylon. On request the names and addresses of the importers of the commodity in that country were expeditiously transmitted to the firm after consultation with the Ceylon Trade Commissioner, Bombay.

(13) **Silver Pocket Cigarette Cases.**—A Sialkot firm wishing to contact manufacturers of silver pocket cigarette cases in this Province wrote to the Department for the necessary information. Detailed enquiries were made through the District Industrial and other officers of the Department and the names and addresses of concerns and of individuals willing to execute orders with their production capacity were passed on to the party.

(14) **Ply Wood.**—A concern in Godhra dealing mainly in timber wrote to say that a very large quantity of *salai* wood was available with them. They desired to be informed whether the wood could be utilised in the manufacture of plywood. The concern was supplied the necessary information after consulting appropriate authorities.

(15) **Agar Agar.**—A Bombay firm evinced keen interest in the trade in Agar Agar and requested this Department to supply them names and addresses of its manufacturers in India. The Director of Industries, Travancore, was consulted in the matter and the information supplied by him was passed on to the firm.

(16) **Sugar Coated Fever Tablets.**—A chemical works in Bombay manufacturing sugar-coated fever tablets desired to contact a firm which could press powder into tablets and coat them with sugar. After careful enquiries the name of a reliable party who could take up the work was suggested to the enquirer.

(17) **Metal Polish.**—A factory in Lahore manufacturing metal polish and which received subsidies from the Punjab Government approached this Department with a request to furnish them the names and addresses of dealers in electroplating materials so as to enable them to push the sale of their products in this Province. The information was made available to the party through the Director of Industries, Punjab.

(18) **Wheat Starch.**—An Import-Export firm in Bombay wanted to establish business connections with starch manufacturers in Punjab. The matter was referred to the Director of that Province and the information supplied by him was forwarded to the party.

(19) **Aluminium and Brass Wires.**—A wire manufacturer in Bombay had contracted with the Supply Department for the supply of aluminium rivets of all descriptions and sizes. As he experienced great difficulties in securing aluminium wire at reasonable rates, a request was made to this Department to furnish the names and addresses of dealers of machinery needed in aluminium wire-making. Literature in aluminium wire-making was also sought. Full particulars were made available to the enquirer expeditiously.

(20) **Bobbins and Shuttles.**—A Gujarat Manufacturer ot bobbins and shuttles found it difficult to get the required quality of wood in sufficient quantities. He wanted information about Indian woods which could enable him to produce good quality bobbins and shuttles. He also wanted information about centres where research work on the manufacture of bobbins and shuttles with Indian woods has been carried out in India. The requisite information was supplied to the party.

CHAPTER XVIII.

TECHNICAL AND INDUSTRIAL EDUCATION.

165. **Number of Schools.**—The number of Technical and Industrial schools under the control of the Board was 77, as given in the list attached. The schools were classified as under :—

(*a*) Schools maintained by Public and Private Bodies aided by the Department of Industries	31
(*b*) Schools maintained by Government	5
(*c*) Government Reformatory and Settlement Schools	4
(*d*) Institutions recognised by the Department of Industries for Inspection and Examination purpose	37
Total ..	77

A complete list of these institutions is given in Appendix O to the Report.

THE COMMITTEE OF DIRECTION FOR TECHNICAL AND INDUSTRIAL TRAINING.

166. **Constitution of the Committee.**—The personnel of the Committee was amended with an addition of one member as the representative of the Institution of Engineers (India), Bombay centre. The designation of the Committee was also changed from "Committee of Direction for Technical and Industrial Training", to "Board of Technical and Industrial Training". The personnel for the year under report remained the same except the following :—

(1) Mr. R. R. Bakhale was nominated in place of Mr. K. K. Desai.

(2) Mr. F. E. Bharucha was nominated as the representative of the Institution of Engineers (India), Bombay Centre.

167. **Inspection.**—The Inspector of Technical and Industrial Schools visited and inspected the schools in the normal discharge of his duties. The Secretary also visited some of the Institutions and gave general directions where necessary. The inspection reports were sent to the respective schools for their guidance and information.

Mr. G. R. Samant, Inspector of Technical and Industrial Schools was appointed as Superintendent of Jail Industries, and Mr. C. E. Krishnamurti was appointed in his place.

Mr. B. B. Pradhan, continued to be the Secretary to the Board and also held the post of Deputy Director of Industries vice Mr. D. C. Gupta retired.

168. **Examination Results.**—The Annual Examinations of the Technical and Industrial Institutions for the year 1942–43 were held in April 1943, and out of 1,971 candidates who appeared in the different examinations, 1,549 were successful showing a percentage of 78. The successful candidates were awarded certificates under the seal of Government and were signed by the Chairman and the Secretary, Board of Technical and Industrial Training, and the Director of Industries, Bombay.

169. **Grant-in-aid.**—31 Technical and Industrial Institutions were in receipt of Grant-in-aid from the Department of Industries, through the Board of Technical and Industrial Training and the total amount of grant-in-aid paid to these schools was Rs. 42,661. The St. Xavier's Abdulla Fazalbhoy Technical Institute, Bombay, The Khalsa College Technical Institute, Bombay and Industrial Classes attached to the Lokmanya Seva Sangh, Vile Parle, were registered for grant-in-aid purposes.

170. **New Schools recognised.**—The following two institutions were recognised by the Board during the year under report :—

(1) Mahila Shivan Kala Mandir, Malvan, for Ladies' Tailoring.

(2) Mrs. Saraswatibai Godbole's Tailoring Class, Poona, for Ladies' Tailoring and Tailoring and Cutting.

Information on technical matters was supplied to the following parties :—

(1) Hon. Secretary, Kutch Dasha Oshwal Jain Pathashala, Bombay.

(2) Kumarika and Stree Mandal, Vile-Parle.

(3) V. V. Chiplonkar, Baroda.

(4) The Principal, City High School, Nadiad.

(5) Annie Johnstone, Bombay.

171. **Expenditure.**—The expenditure of the Board was as under :—

	Rs. a. p.
(1) Expenditure in connection with Committee but borne on establishment of Director of Industries	4,790 6 0
(2) Expenditure in connection with Committee ..	6,227 2 0
Rs.	11,017 8 0

The sum of Rs. 1,653–12–6 was credited to the account of Government under XXXII, Industries.

THE VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY.

172. Mr. P. B. Advani continued to be the Chairman of the Board of Management of the Institute.

The standard and Number of courses offered by this Institute remained unchanged during the year.

583 candidates applied for admission of whom 185 were admitted. 135 of these belong to this Province.

The Results of the Annual Examination set out below indicate satisfactory progress :—

Courses.	Number of Students who	
	Appeared.	Passed.
Mechanical Engineering	48	40
Electrical Engineering	43	26
Textile Manufacture	27	25
Technical Chemistry	21	17
Sanitary Engineering and Plumbing	9	9

173. **Miscellaneous Courses.**—Miscellaneous courses offered by the Institute on Saturday mornings in elementary mechanical and electrical engineering, cotton spinning and weaving, electrical wiremen's and electricians' work and the bi-weekly evening classes in elementary principles of radio communication maintenance and repair of radio instruments, etc., continued to be attended by a large number of persons employed in different trades in the City of Bombay.

174. **Expenditure.**—The total expenditure during the year incurred by the Institute amounted to Rs. 2,78,075, of which Rs. 1,25,000, were as usual given by Government as grant-in-aid.

THE RANCHHODLAL CHHOTALAL TECHNICAL INSTITUTE, AHMEDABAD.

175. This is a Government Institution. During the year under review 139 candidates applied for admission in different sections. Out of these, 29 turned up for direct admission, having passed higher Educational qualifications (Matric passes or above). In all 43 new admissions were made, 17 in Mechanical Engineering; 15 in Cotton Spinning; and 11 in Cotton Weaving.

The total number of students on the roll on 31st March 1944 was 95.

Forty-seven students appeared at the annual examinations in April 1943 of whom 38 passed.

No student appeared or applied for City and Guilds of London Institute Examination during the year under report.

176. **Wiremen's Classes.**—Thirteen students appeared at the annual examination conducted by the Board of Technical and Industrial Training, Bombay. Eleven of these were successful.

177. **Expenditure.**—The total expenditure during the year incurred by the Institute was Rs. 34,160–12–3 and receipts were Rs. 3,083–1–9 as detailed in Appendix Q.

THE SCHOOL OF INDUSTRY, RATNAGIRI.

177A. **Admissions.**—Twenty-three students were admitted to different courses during the year and the total number of students on roll at the end of the year was 66.

177B. **Examinations.**—The Board of Technical and Industrial Training, Bombay, conducted annual examinations with the following results :—

Name of Course.	Number of Students who Appeared.	Number of Students who Passed.
Trained Mistry	6	5
Carpentry	14	12
Mechanical Apprentice	2	2

178. **Scholarships.**—Twelve Government and nine Ellis scholarships each of Rs. 5 per month were awarded. Besides one B. C. scholarship of Rs. 7 per month was awarded by the Director of Industries, Bombay.

179. **Expenditure.**—The total expenditure of the School was Rs. 14,283–2–9 and the receipts were Rs. 2,795–1–0 as detailed in Appendix R.

ELPHINSTONE TECHNICAL HIGH SCHOOL, BOMBAY.

180. **Admissions.**—This year the number of applications for admission to Standard IV Technical from Standard III students of this School was 12 and from outside schools about 50. In all 51 students were admitted.

181. **Scholarships.**—In all 18 scholarships of monthly value of Rs. 7 each were awarded during the year.

GOVERNMENT TANNING INSTITUTE, BANDRA, BOMBAY 20.

182. **Admissions.**—During the year 45 applications for admission—13 for the Advanced and 32 for Artisan course—were received. Five students were admitted to the Advanced course and 20 students to the Artisan course. One student from outside this Province was admitted to the Advanced course on payment of fee of Rs. 200 per year.

183. **Examinations.**—The examinations for session ending May 1943 were conducted by the Board of Technical and Industrial Training and the results were as follows :—

Course.	Number of students who Appeared.	Passed.
Advanced II year	2	2
Advanced I year	4	3
Artisan	19	19

184. **Scholarships.**—All the Artisan students and two students of Advanced I and II year each were awarded scholarships of Rs. 30 each per month.

185. **Glue Manufacture.**—This work was carried on as usual with success.

186. **Gelatine Manufacture.**—Royal Institute of Science, Bombay, was given all technical advice in the manufacture of gelatine.

187. **Tanning and Flaying Demonstration parties.**—On the request of the Director of Veterinary Services, Bombay Province, Poona, 12 persons were secured for these six parties and all of them were trained at the Institute under the supervision of the Tanning Expert.

188. **Advisory Committee of the Government Tanning Institute and Leather Working School.**—One meeting of the Committee was held during the year.

189. **Excursion.**—The students were taken round about the different important tanneries and leather works.

190. **Receipts and Expenditure.**—The total expenditure incurred by the Institute was Rs. 26,675-13-6 and receipts were Rs. 7,024-10-0 as detailed in Appendix S.

THE GOVERNMENT LEATHER WORKING SCHOOL BANDRA, BOMBAY 20.

191. The regular Artisan and Advanced courses were started from 16th June 1944.

192. **Admission.**—In all 35 candidates were admitted out of which 16 were for Artisan course and 5 for Advanced course. At the close of the year there were 12 students in Artisan course and 5 in Advanced course. Three students from Surat District were admitted as private students and they were paid scholarships by Sir Purshottamdas Thakurdas of Surat.

193. **Scholarships.**—Due to rise in prices Government were approached to enhance the scholarships awarded to the students of the Institute and the same have been enhanced from Rs. 15 per month to Rs. 30 per month.

194. **Results.**—Out of 10 students who appeared for annual examination in the year 1943 all passed out successfully.

195. **Staff.**—The Government of Bombay have been pleased to convert the post of Superintendent, Government Leather Working School, into a gazetted one in Gazetted Staff class II and designate it as Leather Expert and Superintendent, Government Leather Working School. Mr Bhalekar the present Superintendent was allowed to hold the new post. A post of a store-keeper has been sanctioned for the School by Government for two years in the first instance.

196. **Advisory Committee.**—As the period of sanction of the Advisory Committee for Government Leather Working School and Tanning Institute expired the Government have been pleased to reappoint the same members on the Committee for a further period of two years. The meeting of the Committee was held in the month of March.

197. **Receipts and Expenditure.**—The total expenditure of the School was Rs. 13,721-7-10 and receipts were Rs. 2,938-10-0 as detailed in Appendix T.

POWER WEAVING INSTRUCTIONAL INSTITUTE, SHOLAPUR.

198. Government were pleased to sanction in May 1942 a scheme for the conversion of the Hand Weaving Institute, Poona, into a Power Weaving Instructional Institute and directed its transfer to Sholapur. The actual work of the Institute started in the month of July 1943. The necessary equipment of the Weaving Institute was transferred to Sholapur and the Institute is using machinery of Municipal Technical School on rental basis.

The last year there were 2 batches ; one batch of new students who were admitted to Power Weaving course and the other batch was of first year Advanced course who were promoted to 2nd year Advanced course.

199. **Examinations.**—Ten students who were on roll and were undergoing training in the Power Weaving course appeared in the sessional examination held by Board of Technical and Industrial Training, Bombay, and 5 of them were successful.

200. **Scholarships.**—Six scholarships of the value of Rs. 10 each are awarded to six deserving students.

The expenditure incurred on the Institute during the year is given in the Appendix U.

GOVERNMENT APPRENTICE SCHEME.

201. The progress of the Scheme during the year under review and its present position may be judged from the following statistical summary :—

1943–1944.

	Bombay	Ahmedabad
(1) Number of applications received from candidates seeking admission to the Scheme	176	70
(2) Number of candidates permitted to appear for interview (there was no written entrance examination)	159	69
(3) Number that actually appeared for interview	154	61
(4) Number of vacancies	160	50
(5) Number actually allotted	150	50

	Bombay		Ahmedabad	
	Mills	Others	Mills	Others
(6) Distribution of apprentices by Textile Mills and others ..	113	47	50	..

(7) Number of co-operating establishments—

	Bombay	Ahmedabad
Mills	31	31
Workshops	6	....
Chemical firms	1	....
Presses	4	....

The following table shows the number of apprentices under training at the close of the year during March 1944 :—

Year	Bombay	Ahmedabad
I	115	81
II	53	25
III	49	28
IV	16	8
V	25	....

A new batch of 17 cadets joined the Scheme in January 1944. The following is the number of cadets on roll :—

Year.	
III	17
IV	12
V	11
Total ..	40

SCHOLARSHIPS.

202. The following Government Scholarships were awarded :—

(1) **Government Special Scholarships tenable at the Victoria Jubilee Technical Institute, Bombay.**—Out of 10 scholarships available for award each year to the Intermediate and Backward classes and Muslims, 5 were awarded to the Intermediate Class, 3 to Muslims and one to Backward Class candidates.

(2) **Scholarships in Technical Chemistry.**—Out of the 3 scholarships to be awarded in 1942–43 for research work tenable at the R. I. S., Bombay, 2 new scholarships were awarded during the year both tenable at R. I. S., Bombay.

(3) **The Scholarships in Electrical Engineering.**—The scholarship for practical training in Electrical Engineering awarded in 1942–43 terminated as it was sanctioned for one year only. One new scholarship was awarded during the year under report tenable at the Workshop of Messrs. B. E. S. & T. Co., Ltd.

(4) **Scholarships and Free-studentships to Backward Class Students in Technical Schools.**—During the year under report various sets of scholarships tenable for 1 year 2 years and 3 years were awarded on the recommendation of the Backward Class Officer, Bombay Province, Poona.

CHAPTER XIX.

WEIGHTS AND MEASURES SECTION.

203. During the year under report, the enforcement of the Bombay Weights and Measures Act, 1932, was carried out satisfactorily throughout the Province by Government Inspecting Units. The work of verification, reverification and stamping of traders' weights, measures, etc., was done successfully. In some cases, the Inspectors were unable to pay regular inspection and surprise visits to traders' premises, being burdened with additional work of testing producer gas plants.

204. **Act.**—Section 22 of the Bombay Weights and Measures Act, 1932, has been amended by Government so as to make it obligatory on traders to produce for inspection before the Inspectors all weights or measures or weighing or measuring

instruments kept on any premises used for trade, except such as are exempted under section 46 of the Act, whether such weights, etc., are used or are in their possession for use for trade or not.

205. **Staff.**—From November 1943 onwards, Mr. N. F. Mooraj, Warden of Weights and Measures is attending to the work of the Industrial Engineer in addition to his own duties. Mr. V. V. Apte, Assistant Warden of Weights and Measures, has continued to hold the post of Assistant Producer Gas Plant Engineer, and discharged the duties thereto, side by side with his own work. Mr. P. H. Dalal Assistant Warden of Weights and Measures, continued in the post of Assistant Controller of Kerosene, during the year under report and Mr. V. M. Pednekar, Officiating Senior Inspector of Weights and Measures, officiated as Assistant Warden of Weights and Measures, vice Mr. P. H. Dalal.

206. **Prosecutions.**—During the current year over 400 cases were submitted by the Inspectors of Weights and Measures in Bombay City and from the mofussils for prosecution. From these 176 cases were selected and sanctioned for prosecution by this Department after considering the type, gravity and frequency of offences, status of offenders, and the nature of evidence available. 112 cases resulted in outright conviction and in 8 cases, the offenders were acquitted by the Court. The remaining 56 cases were pending trial in the Court.

207. **Other Provinces and Indian States.**—At the request of the Indian Stores Department, for recommending a suitable candidate for the post of Examiner of Stores at Aligarh, the name of Mr. P. G. Widwans, officiating Senior Inspector of Weights and Measures, was suggested and he was allowed to proceed to Aligarh on 16th October 1943. In November 1943, spare equipment of weights and measures of the total value of Rs. 2,559–9–0 was sold to that Department. The Punjab Government also made enquiries regarding spare sets of weights and measures available for sale. That Government is still negotiating in the matter with this Department.

In June 1943, two Secondary Standard sets of weights and measures, kept at Karachi and Sukkur Treasuries by the Sind Government were reverified and stamped by this Department at the prescribed fees of Rs. 300 per set.

Inquiries regarding the Bombay Weights and Measures Act, 1932, and the rules thereunder were received during the year under report from Baroda, Bikaner, Mysore, Hyderabad (Deccan), and other Indian States as well as from Bengal, Punjab and Madras Governments and the required information was supplied to them as and when required.

208. **Inspection tours.**—During the year under review the Warden and Assistant Warden paid several inspection visits to the various districts of this Province.

209. **Expenditure and Receipts.**—The expenditure and receipts in connection with the enforcement of the Act, during the financial year 1943–44 and two preceding years were as follows :—

Year.	Expenditure.	Receipts.
	Rs.	Rs.
1941–42	2,64,269	3,81,814
1942–43	2,22,670	4,30,329
1943–44	2,44,899	4,56,822

210. **General.**—During the current year 30 Inspectors of Weights and Measures did the work of Producer Gas Plants, in the various districts of this Province in addition to their own work. From February 1944 onwards 8 more Inspectors were allotted to Producer Gas Plant Work side by side with their own work.

Several weights and measures used in numerous Government Grain Shops in the Bombay City were reverified and stamped free of charge, from time to time at the request of the Civil Supplies Department, Secretariat.

Mr. S. D. Parsharami, posted as Inspector of Weights and Measures, Kolaba District, Southern Division, was appointed to the post of Assistant Engineering Superintendent, in the Elphinstone Technical High School, Bombay, with effect from 1st July 1943. Similarly Mr. B. R. Dhurandhar, posted as Inspector of Weights and Measures, Bombay City, " B " Division, was appointed to the post of Assistant Superintendent, School of Industry, Ratnagiri, with effect from 1st November 1943.

CHAPTER XX.

ADMINISTRATION OF WAR-TIME INDUSTRIAL CONTROLS.

(1) YARN CONTROL.

211. During the year under report licences of licensees who have submitted the monthly statements regularly were renewed for a further period of one year from 1st May 1943 to 30th April 1944 in respect of 1,253 wholesale licences and 937 retail licences. The total number of new licences issued during the year 1943-44 was 293 wholesale licences and 296 retail licences. There were 267 new applications which were kept pending for want of certain detailed particulars. Licences were refused in respect of 496 applications as the parties concerned were starting the yarn business afresh.

Under condition No. 2, of the licence issued the dealers were required to submit the monthly reports of the stock of yarn held by them on the 1st of every month and these returns were tabulated in the monthly registers.

The Department was forwarding to all members of the Yarn Advisory Committee a brief monthly review of work done in the Yarn Section for their information.

(2) COTTON CLOTH AND YARN CONTROL.

212. During the year under report partial administration of Cotton Cloth and Yarn Control Order, 1943, was entrusted to this Department. Under this Order the dealers in cloth and yarn in this Province submitted to this Department in duplicate their stock of cloth and yarn as on 31st July 1943. A consolidated statement of the stock was prepared from these returns and forwarded to the Textile Commissioner, Bombay, for information. The duplicate copies of the returns were also forwarded to the various District Magistrates of the districts concerned for such action as might be deemed necessary.

Under the Bombay Cotton Cloth Dealers' Licensing Order, issued by Government with effect from 3rd August 1943, this Department had to issue cloth licences to dealers in Bombay City and Bombay Suburban District. Applications for dealers as well as hawkers licences were received together with necessary fees. Licences were prepared and posted to the parties after the necessary entries were made in special registers

maintained for the purpose. The total number of licences issued by this Department during the year under report were about 18,000 dealers licences and about 1,200 hawkers licences.

This Department did work in connection with the organisation of associations for the allotment of Texmark numbers for the products processed by hand dyers and hand printer's Associations. The works of the members of the Association formed were inspected and reports of same were forwarded to the Textile Commissioner with necessary recommendations for allotment of Texmark number to the parties concerned. This Department prepared copies of stock returns of the stock as on 31st July 1944 with an estimated value of Rs. 20,000 and over and forwarded the same to the Special Officer, War Risk Insurance and also to the Textile Commissioner and Government of India. A consolidated statement of the returns of stock of cloth held by dealers in Bombay and Bombay Surbuban District for the quarter ending 29th February 1944 was prepared and sent to Government for their information.

In connection with the order, arrangements were made to receive returns of unstamped cloth as on 10th December 1943 from dealers in cloth and these were subsequently consolidated and forwarded to Government.

(3) KEROSENE CONTROL.

213. The circumstances necessitating control of distribution of kerosene oil were mentioned in the last year's report. The supply difficulties and the strain on the available supplies continued. The Control Order had to remain in operation during this year also. Under this order, the average number of permits for industrial use increased as more and more industries applied for permits. The total number of applications for industrial use of kerosene oil that were dealt with during the year was 35,926. All applications were strictly scrutinised, accompanied by spot inquiries and permits for the just and bare minimum requirements of the industries were issued. During the year, number of kerosene permits almost reached to 3,000 permits per month. The Scheme worked quite satisfactorily and kept industries going.

As in the last year, the Department continued granting " M " permits for distrition of kerosene oil for lighting purposes through various employers and mutual stores. During the year, the average number of " M " permits issued was about 300 in number for about 80,000 gallons of kerosene oil per month. Quota for each establishment was fixed at the rate of ½ gallon per month per family of workers employed by the concern. Thus about 1,60,000 families in Bombay City and Bombay Suburban District were supplied kerosene oil through this channel. In other words, taking an average of 5 persons per family about 8 lakhs of members of City's population, living in areas where electricity is not available, were served with kerosene. However, for more systematic distribution of kerosene oil on basis of ration cards, Government were pleased to introduce the scheme of partial rationing of kerosene oil for dark tenements in Bombay City only with effect from 1st March 1944. Hence the Department discontinued issuing " M " permits to M-licensees in Bombay City with effect from 1st March 1944. Only in Bombay Suburban District, the " M" permits system was continued and on an average about 50 " M " permits were issued per month.

During the year, several inquiries regarding supply of kerosene oil to various industries were received from mofussil places. The Department supplied requisite information and tendered necessary advice.

On the introduction of rationing order for kerosene oil on 1st March 1944 in Bombay City, the work of supervision of kerosene licences in Bombay City was taken by the Controller of Rationing, Bombay, from 1st March 1944. This office, however, continued to supervise the kerosene oil licences in Bombay Suburban District.

(4) PRODUCER GAS PLANT SCHEME.

214. **General.**—During the year under review, 24 manufacturers of Producer Gas Plants presented their models for tests and got the same approved. The total number of models provisionally approved up to 1st April 1944, increased from 36 to 64.

Six Motor vehicle owners took the advantage of the Government loans for purchasing producer gas plants, the total sum so advanced during the year being Rs. 9,605. Other facilities such as remission of taxation to the extent of 50 per cent. to motor vehicle owners and recommending deserving manufacturers of producer gas plants for steel converted to producer gas in this Province increased from 1,659 on 1st April 1943 to 2,427 up to 1st April 1944.

215. **Rules and Regulations.**—The rules providing for compulsory verification of new plants at the manufacturers premises and for periodical inspections of the plants fitted to motor vehicles were promulgated and enforced during this year. Every motor vehicle other than a motor car fitted with a producer gas plant is now inspected once every six months with a view to see that there is no undue deterioration on the engine due to improper use of the producer gas plants.

216. **Staff.**—As a result of the increased work of inspection owing to the promulgation of the special rules and the increase in the number of vehicles converted to gas the inspecting staff was further augmented by increasing the number of inspecting units from 30 to 38 in the whole Province.

217. **Producer Gas Plant Testing Laboratory.**—The Producer Gas Plant Testing Laboratory set up on the premises of the V. J. Technical Institute, Matunga, was completely equipped during the year. The following equipment is now installed :—

(*i*) One V-8 Ford Engine rated H.P.-30.

(*ii*) One Heenan Froude Dynamometer—directly coupled to the engine.

(*iii*) One electrically driven centrifugal pump.

(*iv*) One revell air exhauster coupled to a 5 H.P. electric motor.

(*v*) One conditioning chamber —(electrically heated).

(*vi*) One constant-flow gas-calorimeter.

(*vii*) One new controlled vehicle—Chevrolet 1942 model fitted with specially designed producer gas plant for conducting experiments.

The bench test on various producer gas plant models is now in progress.

Sir Kenneth Mitchell, Controller of Road Transport, Dr. Dunnicliff, the Assistant Controller of Road Transport, Mr. T. T. Kothavala, the Provincial Motor Transport Controller, Bombay and Dr. L. C. Verman, the Assistant Director, Board of Industrial and Scientific Research, paid visits to the above Laboratory and expressed satisfaction at the work being carried out.

218. **Reliability Tests.**—Mr. V. V. Apte, the Assistant Producer Gas Plant Engineer, was deputed to New Delhi to witness the reliability trials on producer gas plants arranged by the War Transport Department in May 1943. Five manufacturers of producer gas plants from Bombay Province participated in the trials, out of which four were awarded certificates of merit for good performance.

219. **Experimental Work.**—The following experimental work was taken in hand. As, however, the station Wagon of this Department was disposed of and some time elapsed before a new vehicle was purchased and fitted up this work could not be completed, during the year under review.

(*i*) Study of various filtering mediums for filtering the producer gas.

(*ii*) Experiments on the cracking of oils in the generator with a view to increasing the calorific value of the producer gas with the resultant increase in power.

(*iii*) Further Experiments on water injection.

(5) PROVINCIAL COAL DISTRIBUTION SCHEME.

220. The Provincial Coal Distribution Scheme mentioned in the last year's report was in operation during the year under report. The Provincial quota in the beginning of the year stood at 600 wagons per month. From May 1943, it was increased to 750 wagons per month. Due to the acute wagon position and having to give preference to Loco Coal and Coal required for Defence purposes the normal priority supply under the Provincial Distribution Scheme was suspended by the Controller of Coal Distribution during the months of April, and from July to October 1944. A special supply of 150 wagons, to meet the emergent demands of the consumers was, however, allotted by him for the month of September 1943. With the resumption of the normal priority supply from November 1943, the quota allotted to this Province was reduced from 750 wagons to 350 wagons per month.

The Government of India impressed upon the Provincial Governments the urgency and importance of limiting supplies to what is regarded as absolutely essential requirements, and the need for consumers to go in for alternative fuels for use wherever possible for domestic as well as for industrial consumption.

A statement showing the number of wagons recommended by the Provincial Coal Controller during the year under report is appended hereto. (Appendix V).

CONTROL OF PRICES.

221. The selling prices of coal and coke, based on the pithead rates communicated to this office by the Controller of Coal Distribution, Calcutta, were controlled in this Province under the Defence of India Rules with effect from 1st April 1943. The prices originally controlled were as under :—

Steam Coal .. Rs. 37–8–0 per ton Ex-Depot of the seller.

Hard Coke .. Rs. 52–8–0 per ton Ex-Depot of the seller.

Intimation having been received about the rise in the pithead rate for Steam Coal the selling price therefore in this Province was raised to Rs. 39–8–0 per ton with effect from 4th June 1943.

Representations had been received from the dealers and consumers regarding the fixation of retail rates and control over the delivery charges in respect of coal and coke. Steam Coal being generally sold in larger lots it was decided to fix retail selling price only for hard coke and to control the delivery charges in respect of steam coal and hard coke. Selling prices and delivery charges in respect of soft coke (Gas Coke and Cess Coke) were also controlled under the Defence of India Rules with effect from 15th February 1944. A statement showing the controlled

prices and the delivery charges in respect of coal and coke as on 31st March 1944, is given below :—

Type of Coal.	Selling price (Ex-Depot). Wholesale (10 cwts. and over) (Loose).	Selling price (Ex-Depot). Retail (Less than 10 cwts.) (Loose).	Delivery charger per cart load. Within a radius of 5 miles.	Delivery charger per cart load. Beyond five miles.	Weight of cart load.
	Rs. a. p. per ton.	Rs. a. p. per ton.	Rs. a. p.		
Steam Coal	39 8 0	....	6 0 0	*Pro rata.*	¾ ton.
Hard Coke	52 8 0	3 4 0	6 0 0	„ „	½ ton.
Soft Coke (Gas Coke and Cess Coke)—					
(*i*) Industrial and Domestic Size ..	42 0 0	2 8 0	2 8 0	„ „	½ ton.
(*ii*) Rivet Size	38 0 0	2 4 0	2 8 0	„ „	½ ton.
(*iii*) Breeze Size	30 0 0	....	2 8 0	„ „	½ ton.

ADVISORY COMMITTEE FOR COAL AND COKE.

222. Originally Government were pleased to set up two Advisory Committees one for Coal and the other for Coke, to advise the Provincial Coal Controller in the administration of the Provincial Distribution Scheme. Meetings of these Committees were being called separately in the beginning. Discussions at these meetings being of a common nature it was generally found convenient to convene joint meetings of both the Committees referred to above, for consideration of various points arising out of the Scheme. It was, therefore, proposed to Government to set up only one Advisory Committee comprising *inter alia* of the representatives of the coal and coke trade. Government were pleased to approve of the proposals and to set up one Advisory Committee only for coal and coke for one year up to 30th November 1944 comprising of the following representatives :—

(1) The Provincial Coal Controller—Chairman.

(2) Mr. P. N. Vevaina, representing the Coal Trade.

(3) Mr. V. C. Shah, representing the Coke Trade.

(4) Mr. Thakorlal H. Vakil, representative of the Indian Merchants' Chamber.

(5) Mr. Murarji J. Vaidya, representative of the Association of Indian Industries.

(6) The Assistant Controller (Coal and Coke)—Secretary.

PERMITS FOR EXPORT OF COAL AND COKE.

223. In addition to the 9 applications that were under consideration at the close of the last year 48 additional applications were received during the year under report. Out of these permits were issued in 51 cases while 6 applications were rejected. The total quantity of coal and coke covered by the export permits

issued during the year under report amounted to 7,331–7 tons *vide* statement given below :—

Type of Coal.		By Sea.		By Rail.		By Road.		Total.	
		No. of permits.	Quantity covered. Tons.	No. of permits.	Quantity covered. Tons.	No. of permits.	Quantity covered. Tons.	No. of permits.	Quantity covered. Tons.
Steam Coal	..	13	4,697-9	5	27–10	2	301–0	20	5,025–19
Hard Coke	..	6	56-0	2	6–10	..	....	8	62–10
Soft Coke	..	10	29-0	3	4–0	..	....	13	33–0
Slack Coal	..	10	2,209-18	..	....	..	....	10	2,209–18
Total	..	39	6,992–7	10	38–00	2	301–0	51	7,331–7

CHAPTER XXI.

WORK OF THE DEPARTMENT—MISCELLANEOUS.

224. During the year the Department was engaged in various kinds of miscellaneous activities. The more important of these were (1) Assistance to other Departments of Government, (2) Attendance at the meetings of Committees and Conferences, (3) Partaking in industrial exhibitions and museum administration, (4) Assistance in the scheme of training of Rural Assistants, etc. Below is given a short account of these activities :—

(1) ASSISTANCE TO OTHER DEPARTMENTS OF GOVERNMENT.

225. (i) On several occasions during the year the Secretary, Board of Transport, Bombay, requested the assistance of this Department in deciding the question of transport priorities for the movement of raw materials and consumers' goods. Special investigations had to be undertaken for this purpose many a time.

(ii) The Commissioner of Excise, Bombay, consulted this Department on the subject of priorities for raw materials required by the Sugar factories who have been granted licences for the manufacture of Rectified Spirit. Necessary investigations were made by the technical officers of this Department and reports were submitted to the Commissioner of Excise.

(iii) The Collector, Bombay Suburban District requested the opinion of this Department about the advisability of allowing certain factories to be located at certain places in the District. Necessary advice was given.

(iv) A number of samples of charcoal were tested with a view to the suitability as Producer Gas Plant fuel. These were made on behalf of different departments.

(v) On behalf of the Collector of Customs, Glass Factories were visited by the Officers of this Department for checking Soda Ash consumption for the manufacture of glass with a view to enable them to grant rebate.

(2) CONFERENCES AND COMMITTEES.

226. During the year the Director attended (1) meetings of the Central Post-War Reconstruction Committee, (2) the Provincial Rural Development Board Meetings

held in Bombay, (3) t h m onthly meetings of the Board of Management of the Victoria Jubilee Technical Institute, Bombay, and the Board of Technical and Industrial Training, of both of which the Director was Chairman.

227. **District Rural Development Board Meetings.**—The meetings of the Rural Development Board called by the Collectors of the different Districts of the Province were attended by the respective officers of the Department nominated for the purpose. All possible assistance was given by the Department in connection with the Rural Development work.

(3) EXHIBITIONS.

228. The Department participated in the following exhibitions, shows, etc., during the year :—

(i) **Puntamba, District Ahmednagar.**—This was an agricultural show in which the Department demonstrated manufacture of leather, glass bangles, lacquer work and cane and bamboo work.

(ii) **Nasik, District Nasik, Nasik District Cattle show.**—In this show the Department demonstrated tanning, glass bangles manufacture, hard and soft fibre demonstration, boot and shoe lace demonstrations.

(iii) **Baramati, District Poona, Poona District Agricultural and Cattle show.**—The Department demonstrated Heskell Ghani, glass bangles manufacture and tanning.

(iv) **Surat, Gold Thread Industry Exhibition.**—This show was organised by the District Industrial Officer, Surat, at the request of the Collector of Surat. Details of this exhibition is given elsewhere.

Bombay and Poona Museums.—The Industrial Chemist continued to attend the meetings of the Board of Trustees of the Lord Reay Industrial Museum, Poona. The bill for reorganising the constitution of the Board of Trustees and placing the institution on a statutory basis drafted by this Department and approved by the Commissioner, Central Division, has been forwarded to Government for their consideration.

On the recommendation of the Department. Government were pleased to sanction the sum of Rs. 500 as grant-in-aid for the development of the Emporium conducted by the museum authorities.

The Director continued to be a member of the Board of Trustees of the Prince of Wales Museum, Bombay, and attended some of its meetings.

(4) TRAINING OF RURAL ASSISTANTS.

229. The institution of a scheme for training of Rural Assistants in doing rural development work at four centres of the Province viz., (1) Manjri, (2) Dhulia, (3) Devihosur and (4) Broach continued during the year under report. The peripatetic teaching parties with improved appliances and equipment continued to impart vocational training at the centres in (1) agricultural carpentry and smithy, (2) hand spinning, (3) hand weaving, (4) dyeing and printing, (5) coir and fibre work and (6) cane and bamboo work.

Below is a short account of the work done at each of the centres during the year.

TRAINING OF RURAL ASSISTANTS.

230. **Rural Assistants Training Scheme.**—The fresh session of the training of rural assistants in Cottage Industries commenced at the Rural Assistants Training Centres, viz., Manjri, Dhulia, Devihosur and Broach from 1st May 1943. Following is a brief account of the work done by the Industrial Instructors at these centres.

231. **Rural Assistants Training Centre, Manjri.**—Theoretical and practical training in Hand Spinning and Dyeing and Printing was imparted in May, June and July 1943, in Hand Weaving and Coir and Fibre Work in August, September and October 1943, and in Cane and Bamboo Work and Agricultural Carpentry in November and December 1943 and January 1944. The number of candidates trained at this centre was 37.

232. **Rural Assistants Training Centre, Dhulia.**—There were 35 students on roll at this centre. Training in Cane and Bamboo work and Agricultural Carpentry and Smithy was given in May, June and July 1943, in Hand Spinning and Dyeing and Printing in August, September and October 1943 and in Hand Weaving and Coir and Fibre Work in November and December 1943 and January 1944.

In addition, the Industrial Instructors on duty at this centre trained the students of the Vernacular Agricultural School in different subjects, as desired by the Director of Agriculture, Bombay Province, Poona.

233. **Rural Assistants Training Centre, Devihosur.**—30 students were trained in Hand Weaving and Coir and Fibre Work in May, June and July 1943, in Cane and Bamboo Work, and Carpentry and Smithy in August, September and October 1943 and in Hand Spinning and Dyeing and Printing in November and December 1943 and January 1944.

234. **Rural Assistants Training Centre, Broach.**—Temporary Industrial Instructors were appointed for a period of three months. 32 candidates were trained in Agricultural Carpentry and Smithy in May, June and July 1943, in Hand Weaving in August, September and October 1943 and in Coir and Fibre Work and Dyeing and Printing in November and December 1943 and January 1944.

The Industrial Instructors on duty at the above centres also gave lectures to the Supervisors of the Supervising Training Class in the subjects.

The Specialised Training in Cottage Industries was arranged at the centres from 1st February 1944 to 30th April 1944.

During the period, the Rural Assistants Training Scheme was in force, i.e., from 1st May 1941 to 30th April 1944, this Department absorbed 15 trained Rural Assistants. They were posted under the three District Industrial Officers at Belgaum, Nasik and Surat respectively. The work entrusted to the Rural Assistants by the District Industrial Officers consisted of carrying on propaganda for the Departmental Training Schemes, Loan and Subsidy Schemes, Census Work of Cottage Industries in villages, etc.

CHAPTER XXII.

STAFF AND EXPENDITURE.

(1) STAFF.

235. Mr. P. B. Advani held the post of the Director of Industries up to 31st January 1944, and proceeded on leave from 1st February 1944. In addition he held the charge of the posts of the Yarn Commissioner, Stores Purchasing Officer, Controller of Kerosene (Industrial Use) and Provincial Controller of Coal and Coke. He also worked as the Controller of Cotton Cloth and Yarn (Control) Order, 1943, from 15th August 1943 to 31st January 1944.

I took the charge of the post of the Deputy Director of Industries on 3rd January 1944, and assumed the charge of the In-charge Director of Industries on 1st February 1944, as Mr. P. B. Advani, proceeded on leave prior to his retirement.

Mr. D. C. Gupta held the post of the Deputy Director of Industries up to 30th April 1943 and proceeded on leave prior to retirement from 1st May 1943 to 29th July 1943, and retired on 30th July 1943.

Mr. M. E. Haskell, Industrial Engineer was under suspension throughout the year.

Mr. B. Sengupto held the post of the Industrial Engineer from 3rd May 1943 to November 1943.

Dr. M. R. Mandlekar held the post of the Industrial Chemist vice Dr. N. R. Damle whose services were lent to the Government of India from 31st December 1941. He reverted and assumed the charge of the post of the Industrial Chemist on 13th May 1943 and held the post for the remaining period of the year.

Dr. S. B. Setna held the post of the Fisheries Officer up to 18th July 1943. He was appointed as the Professor of Zoology at the Royal Institute of Science, Bombay, on 19th July 1943. He, however, continued to work as Fisheries Officer in addition to his duties for the remaining period of the year.

Mr. S. Y. Anandkar, officiated as the Personal Assistant vice Mr. S. S. Rajagopalan, transferred as Special Officer, Handloom Industry.

Mr. S. S. Rajagopalan held the charge of the post of Special Officer, Handloom Industries, throughout the year. In addition the charge of the Assistant Controller, Coal and Coke, was also held by him for the whole year.

Dr. S. M. Dhume held the post of the Officer-in-Charge, Commercial and Industrial Intelligence Section throughout the year.

Mr. D. N. Savkur held the post of the Textile Expert and Designer throughout the year. He continued to be in charge of the scheme for the manufacture and supply of handloom textiles to the Supply Department for the year under report.

Mr. R. U. Patel held the post of the Assistant Stores Purchasing Officer throughout the year.

Mr. N. F. Mooraj held the post of the Warden of Weights and Measures throughout the year. In addition the charge of the post of the Industrial Engineer was held by him from November 1943.

Mr. V. V. Apte held the post of the Assistant Warden of Weights and Measures throughout the year. He also held the charge of the post of Assistant Producer, Gas Plant Engineer, throughout the year.

Mr. P. H. Dalal held the post of the Assistant Controller of Kerosene (Industrial Use) throughout the year.

Mr. V. M. Pednekar was appointed as Officiating Assistant Warden of Weights and Measures throughout the year.

Mr. J. P. Nerurkar held the post of the Accounts Officer throughout the year.

Messrs. R. M. Marfatia, B. S. Kanvinde and N. R. Kembhavi held the posts of the District Industrial Officers, Surat, Nasik and Belgaum respectively, throughout the year.

NEW APPOINTMENTS.

236. Mr. B. B. Pradhan was appointed as Deputy Director of Industries and he took charge of the post from 3rd May 1943 to 2nd January 1944, and also held the post of the Additional Deputy Director from 3rd January 1944 to 31st January 1944 and then held the post of Deputy Director up to 31st March 1944.

I was appointed as the Deputy Director of Industries and took charge of the post from 3rd January 1944.

Mr. J. Ghosh was appointed as Tanning Expert and Superintendent, Tanning Institute, and took charge on 15th October 1943.

TOURING.

237. During the year under review, Mr. P. B. Advani, myself and the Deputy Director of Industries, Industrial Engineer, Industrial Chemist, Fisheries Officer, Warden and Assistant Wardens of Weights and Measures, Textile Expert and Designer, Tanning Expert and Accounts Officer toured throughout the Province as and when necessary.

VISIT TO WORKS.

238. The different officers of the Department visited various concerns in connections with different investigation and for rendering technical advice when necessary.

EXPENDITURE AND RECEIPTS.

239. The expenditure incurred by the Department of Industries during the last five years was as follows :—

	Rs.
1939-1940	9,92,638
1940-1941	8,98,701
1941-1942	14,71,673*
1942-1943	12,07,233
1943-1944	13,38,052

* In this total is included a sum of Rs. 4 lakhs sanctioned by Government in connection with the scheme for the supply of Handloom goods to the Supply Department. The expenditure of the Department as such was Rs. 10,71,673.

The above figures are exclusive of the expenditure on such activities as the marketing of handloom products and the Wool Scheme referred to in Chapter XI. These activities were financed from the funds placed at the disposal of the Government of Bombay by the Government of India and expenditure thereon during the year was as under :—

	Rs.
(1) Marketing of handloom products (cotton) ..	45,102
(2) Wool Scheme	13,659

Thus the total expenditure of the Department excluding Loans and Subsidies was Rs. 13,96,813.

240. The total receipts during the year amounted to Rs. 6,69,263 :—

	Rs.
(i) Fees collected by Government Inspectors of Weights and Measures	4,56,720
(ii) Fees from Fish Curing Yards	1,27,211
(iii) Receipts on account of other activities	85,332
	6,69,263

241. The Department had another very busy year. Apart from the usual increase in the departmental activities, the work undertaken on account of the exigencies of the War was very considerable and often strained the resources of the Department almost to the breaking point. The fact that it was difficult to secure trained men and hence untrained men have had to be engaged in connection with the new activities of the Department added much to the pressure and strain on the various officers and their existing experienced staff. I am glad to be able to record that all the staff shouldered their responsibilities very willingly and well.

S. D. VASHIST,
In Charge Director of Industries.

Old Custom House Yard, Bombay,
21st September 1944.

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APPENDIX A.

Expenditure on and Receipts from the Peripatetic Handloom Weaving and Dyeing Institutions for the year 1943–44.

Credit. Particulars.	Amount.	Debit. Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of articles ..	2,527 13 3	1. Pay of officers	....
2. Fees from students	....	2. Pay of Establishment—Weaving assistant masters, demonstrators, etc.	21,312 14 0
3. Miscellaneous	56 14 9	3. Wages of workmen.. ..	....
		4. Allowances and honoraria ..	3,967 1 0
		5. Dearness allowance ..	2,403 3 0
		6. Scholarships	1,236 11 0
		7. Stores purchased	2,187 12 0
		8. Other miscellaneous ..	6,073 7 11
Total ..	2,584 12 0	Total ..	37,181 0 11

APPENDIX B.

Expenditure on and Receipts from the Tanning Demonstration Parties for the year 1943–44.

Credit. Particulars.	Amount.	Debit. Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of tanned hides and skins	271 3 0	1. Pay of officers	1,375 0 0
2. Fees from students	....	2. Pay of establishment ..	6,002 3 0
3. Miscellaneous	....	3. Allowances and honoraria ..	1,413 2 0
		4. Dearness allowance ..	*1,470 4 0
		5. Stores purchased	672 6 6
		6. Other miscellaneous ..	666 9 3
		7. Grant-in-aid	435 0 0
Total ..	271 3 0	Total ..	12,034 8 9

APPENDIX C.

Expenditure on and Receipts from the Cane and Bamboo Work Demonstration for the year 1943–44.

Credit.			*Debit.*		
Particulars.	Amount.		Particulars.	Amount.	
	Rs. a. p.			Rs. a. p.	
1. Sale proceeds of articles	..	407 3 3	1. Pay of officers ..	..	....
2. Fees from students ..	..	....	2. Pay of establishment	..	1,043 0 0
3. Miscellaneous ..	..	....	3. Wages of workmen	..	....
			4. Allowances and honoraria	..	184 7 3
			5. Dearness allowance	..	218 0 0
			6. Scholarships ..	..	501 15 0
			7. Stores purchased ..	..	282 10 3
			8. Other miscellaneous	..	632 15 9
Total	..	407 3 3	Total	..	2,863 0 3

APPENDIX D.

Expenditure on and Receipts from the Lacquer Work Demonstration for the year 1943–44.

Credit.			*Debit.*		
Particulars.	Amount.		Particulars.	Amount.	
	Rs. a. p.			Rs. a. p.	
1. Sale proceeds of articles	..	145 0 3	1. Pay of officers ..	..	....
2. Fees from students ..	..	....	2. Pay of establishment	..	1,405 10 0
3. Miscellaneous ..	..	....	3. Wages of workmen	..	....
			4. Allowances and honoraria	..	18 12 0
			5. Dearness allowance	..	248 0 0
			6. Scholarships ..	..	396 15 0
			7. Stores purchased	..	132 3 6
			8. Other miscellaneous	..	669 0 6
Total	..	145 0 3	Total	..	2,870 9 0

APPENDIX E.

Expenditure on and Receipts from the Coir Manufacture School for the year 1943–44.

Credit. Particulars.	Amount.	Debit. Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of articles ..	267 14 3	1. Pay of officers	....
2. Fees from students	....	2. Pay of establishment, i.e., Coir Supervisor, weaving masters, etc.	2,855 11 0
3. Miscellaneous	....	3. Wages of workmen.. ..	....
		4. Allowances and honoraria ..	102 8 0
		5. Dearness allowance ..	463 14 0
		6. Scholarships	277 0 0
		7. Stores purchased ..	....
		8. Other miscellaneous ..	1,026 3 0
Total ..	267 14 3	Total ..	4,725 4 0

APPENDIX F.

Expenditure on and Receipts from the Coir Rope and Brush making Demonstration for the year 1943–44.

Credit. Particulars.	Amount.	Debit. Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of articles ..	185 0 0	1. Pay of officers	....
2. Fees from students	....	2. Pay of establishment ..	606 0 0
3. Miscellaneous	....	3. Wages of workmen ..	....
		4. Allowances and honoraria ..	74 6 0
		5. Dearness allowance ..	192 0 0
		6. Scholarships	330 0 0
		7. Stores purchased	....
		8. Other miscellaneous ..	559 10 9
Total ..	185 0 0	Total ..	1,762 0 9

APPENDIX G.

Expenditure on and Receipts from the Soft and Hard Fibre Extraction Demonstration for the year 1943–44.

Credit. Particulars.	Amount. Rs. a. p.	Debit. Particulars.	Amount. Rs. a. p.
1. Sale proceeds of articles ..	53 11 0	1. Pay of officers	....
2. Fees from students	....	2. Pay of establishment ..	946 5 0
3. Miscellaneous	....	3. Wages of workmen ..	....
		4. Allowances and onhoraria ..	94 3 0
		5. Dearness allowance ..	221 11 0
		6. Scholarships	396 11 0
		7. Stores purchased	163 12 0
		8. Other miscellaneous ..	443 1 0
Total ..	53 11 0	Total ..	2,265 11 0

APPENDIX H.

Expenditure on and Receipts from the Pottery Demonstration for the year 1943–44.

Credit. Particulars.	Amount. Rs. a. p.	Debit. Particulars.	Amount. Rs. a. p.
1. Sale proceeds of articles ..	....	1. Pay of officers	....
2. Fees from students*	....	2. Pay of establishment ..	2,943 2 0
3. Miscellaneous	....	3. Wages of workmen ..	....
		4. Allowances and honoraria† ..	1,428 10 0
		5. Dearness allowance ..	380 0 0
		6. Scholarships	207 0 0
		7. Stores purchased	500 0 0
		8. Other miscellaneous ..	798 13 6
Total ..	....	Total ..	6,257 9 6

* Instruction is imparted free of charge.

† This includes honorarium to the Pottery consultant.

APPENDIX I.

Expenditure on and Receipts from the Boot and Shoe Lace, File Strings, Carpet Weaving, etc., School for the year 1943–44.

Credit. Particulars.	Amount.	*Debit.* Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of articles ..	517 4 6	1. Pay of officers	....
2. Fees from students*	....	2. Pay of establishment ..	928 0 0
3. Miscellaneous	....	3. Wages of workmen.. ..	....
		4. Allowances and honoraria ..	86 14 0
		5. Dearness allowance ..	224 0 0
		6. Scholarships	307 8 0
		7. Stores purchased	661 1 6
		8. Other miscellaneous ..	818 5 0
Total ..	517 4 6	Total ..	3,025 12 6

* Instruction is imparted free of charge.

APPENDIX J.

Statement showing Membership, Capital, Advances from Government and Loans from Bank, relating to different Associations under the Marketing Scheme for Handloom Products (Cotton).

Name of the Association.	Membership as on		Share capital as on		Advances from Government for capital as on		Loans from Bank as on	
	31st March 1943.	31st March 1944.	31st March 1943.	31st March 1944.	31st March 1943.	31st March 1944.	31st March 1943.	31st March 1944.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
North Central Divisional Industrial Co-operative Association, Ltd., AHMEDNAGAR	542	593	1,768 11 0	2,109 15 0	38,700 0 0	38,700 0 0	21,297 1 11	50,629 0 4
The Southern Divisional Industrial Co-operative Association, Ltd., HUBLI ..	346	345	1,552 0 0	1,610 0 0	10,000 0 0	4,450 0 0	9,621 13 0	12,203 12 6
The Northern Divisional Industrial Co-operative Association, Ltd., AHMEDABAD ..	564	737	2,306 0 0	2,920 0 0	8,000 0 0	8,000 0 0	16,853 6 6	25,059 0 9
The Sholapur District Industrial Co-operative Association, Ltd., SHOLAPUR ..	622	651	15,586 4 6	15,906 4 6	20,025 0 0	20,025 0 0	90,103 7 7	44,615 6 2
The Industrial Co-operative Association, Ltd., YEOLA, district Nasik ..	727	796	6,488 0 0	7,050 0 0	20,025 0 0	20,025 0 0	1,02,825 1 3	64,591 9 6
The Industrial Co-operative Association, Ltd., MALEGAON, district Nasik ..	314	319	2,848 6 0	3,245 6 0	10,920 4 0	10,780 4 0	*Nil.*	*Nil.*
The Bijapur District Industrial Co-operative Association, Ltd., KAMATGI ..	458	511	2,786 0 0	2,907 0 0	4,500 0 0	4,500 0 0	863 14 6	16,114 4 1
The Industrial Co-operative Association, Ltd., BELGAUM	238	240	2,592 0 0	6,150 0 0	5,650 0 0	7,825 0 0	9,996 10 10	9,996 10 10
The Khandesh District Industrial Co-operative Association, Ltd., DHULIA, district West Khandesh	160	175	2,160 8 0	2,211 3 6	9,450 0 0	9,450 0 0	*Nil.*	8,305 11 0
Total ..	3,971	4,367	38,087 13 6	44,109 13 0	1,27,270 4 0	1,23,755 4 0	2,51,561 7 7	2,31,515 7 2

APPENDIX K.

Statement showing Sales of Raw Materials, Finished Products, Gross Profits, etc., under the Marketing Scheme for Handloom Products (Cotton).

Name of the Association	Sales						Gross Profit	
	Raw Materials		Finished Products		Total			
	1942-43.	1943-44.	1942-43.	1943-44.	1942-43.	1943-44.	1942-43.	1943-44.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
North Central Divisional Industrial Co-operative Association, Ltd., AHMEDNAGAR	2,58,481 1 0	2,34,034 0 3	2,79,052 6 9	2,43,001 4 8	5,37,533 7 9	4,77,035 4 11	7,693 6 6	23,618 0 0
The Southern Divisional Industrial Co-operative Association, Ltd., HUBLI ..	87,396 0 6	37,565 9 6	57,899 8 11	30,459 6 11	1,45,295 9 5	68,025 0 5	9,095 7 3	(Gross Loss) 39 15 9
The Northern Divisional Industrial Co-operative Association, Ltd., Ahmedabad	24,786 7 6	11,743 10 0	51,742 13 3	44,730 11 3	76,529 4 9	56,474 5 3	5,703 0 0	3,081 13 3
The Sholapur District Industrial Co-operative Association, Ltd., SHOLAPUR	5,83,838 7 0	3,24,193 13 3	5,87,138 11 1	2,49,989 10 11	11,70,977 2 1	5,74,183 8 2	43,979 15 2	(Gross Loss) 4,032 15 1
The Industrial Co-operative Association, Ltd., YEOLA, district Nasik	2,50,812 4 6	3,14,331 13 1	1,82,828 4 0	5,42,800 15 1	4,33,640 8 6	8,57,132 12 2	3,710 1 11	90,785 7 9
The Industrial Co-operative Association, Ltd., MALEGAON, district Nasik ..	38,980 6 9	27,023 7 0	62,903 7 9	39,339 9 0	1,01,883 14 6	66,363 0 0	21,555 11 3	3,590 10 3
The Bijapur District Industrial Co-operative Association, Ltd., KAMATGI ..	26,568 10 6	6,487 5 0	17,968 14 9	19,313 14 0½	44,555 9 3	25,801 3 0½	(Loss) 10 9 9	(Gross Loss) 398 6 5
The Industrial Co-operative Association Ltd., BELGAUM	8,445 7 3	162 8 6	24,376 14 3	37,986 15 4	32,822 5 6	38,149 7 10	5,000 0 0	4,825 0 0
The Khandesh District Industrial Co-operative Association, Ltd., DHULIA, district West Khandesh	32,645 14 9	11,893 1 9	21,606 6 9	44,947 7 6	54,252 5 6	56,840 9 3	7,799 0 9	6,245 10 0
Total ..	13,11,954 11 9	9,67,435 4 4	12,85,535 7 6	12,52,569 14 8½	25,97,490 3 3	22,20,005 3 0½	1,04,526 1 1	1,27,675 4 0

APPENDIX L.

APPENDIX L.

Statement showing the different varieties and quantities of fish (in lb.) brought by the launches in 1943-44.

Varieties of fish.	Sir Frederick Sykes.	Lady Sykes.	Lady Brabourne.	Lord Brabourne.	Chand Tara.	Noore Mohamedi.	Rehmani.	Ruparel.	Karimi.	Total.
Bangda (Mackerel) ..	46,160	....	70,300	2,03,620	1,30,200	2,38,000	70,040	1,76,868	67,000	10,02,188
Hulva (Black pomfret) ..	....	500	....	....	....	....	....	140	500	1,140
Surmai (Seer fish) ..	16,600	....	18,560	....	....	....	4,200	1,500	....	40,860
Saranga (White pomfret) ..	....	15,500	600	....	....	....	....	....	16,700	32,800
Dara	....	....	....	....	23,000	....	....	....	....	23,000
Ghol	490	....	2,750	14,980	9,000	....	50	....	....	27,270
Bhing (Herring) ..	....	....	....	....	....	....	....	....	1,000	1,000
Kuppa (Tunny) ..	4,560	....	2,820	110	....	....	....	40	....	7,530
Sakla	1,295	....	....	540	6,300	....	250	480	....	8,865
Miscellaneous	....	2,000	....	....	....	....	....	....	7,400	9,400
Total ..	69,105	18,000	95,030	2,19,250	1,68,500	2,38,000	74,540	1,79,028	92,600	1,154,053

APPENDIX M.

Pro-forma accounts of the fish curing yards for the year ending 31st March 1944.

Expenditure.				*Receipts.*	
" Detailed Expenditure ".			Rs.	" Detailed Receipts".	Rs.
Opening stock of salt			25,282	Total amount remitted to Treasury	1,27,211
Purchase and Transport charges of salt			71,901	*Add*—Overtime fees required from the fish curers shown as less receipts in the account for the year 1942-43	—236
Petty Construction and Repairs—	Rs.	Rs.			1,27,447
Departmental	5,003				
Add—Public Works Department	1,935				
		6,938	6,938	*Less*—Overtime fees received from the fish curers and credited to treasury during 1943-44 to be disbursed to the staff during 1944-45 ..	—178
Other non-contract contingencies	7,360				
Add—Cost of Stationery and Forms	800				1,27,269
		8,160			
Less—Expenditure on model fish curing sheds ..		—600			
		7,560	7,560		
Pay of yard supervising establishment	29,147				
Less—Pay of Establishment in model fish curing shed ..	992				
Leave salary of Establishment in model fish curing shed	—23				
		28,132	28,132		

Allowance, Honoraria, etc., of yard and supervising establishment	11,017		
Less—On account of establishment of model fish curing shed	—305		
		10,712	10,712
Add—Establishment charges payable to Government Departments, etc.—charges paid to Salt Department for providing escort to accompany salt supplied to yards			2,122
Total Expenditure 1943-44			1,52,647
Add—Pensionary charges at 9½ per cent. on maximum pay of establishment			3,435
			1,56,082
Less—Value of salt after close of transaction			—37,531
Net expenditure at the yards			1,18,551
Add—Net profit during the year			8,718
			1,27,269

APPENDIX N.

Statement showing the operations of the Fish Curing Yards in the Ratnagiri and Kanara Districts of the Bombay Province for the year ending 31st March 1944.

Serial No.	Name of the yard.	Year.	Quantity of fish brought to be cured.	Quantity of salt issued.	Quantity of fish removed.	Proportion of fish to each maund of salt.	Total expenditure at the yard including pension contribution.	Receipts. Amount realised by sale of salt.	Miscellaneous receipts.	Stock of salt at the close of the year.	Value of salt at the close of the year.	Total of columns. 9, 10 and 12.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Mds. s. t.	Mds. s. t.	Mds. s. t.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Mds. s. t.	Rs. a. p.	Rs. a. p.
	Ratnagiri District.											
1	Boria	1942-43 ..	3,841 0 0	1,275 0 0	2,882 20 0	3·01	1,712 6 0	1,354 11 0	10 0 0	1,183 32 0	565 4 2	1,929 13 2
				(a)48 20 0				(a)25 10 0				(a)25 0 0
		1943-44 ..	3,667 0 0	1,210 0 0	2,755 35 0	3·04	2,243 11 3	1,505 9 0	6 10 8	1,012 17 0	629 9 1	2,141 12 9
				(a)19 16 0				(a)17 8 0				(a)17 8 0
2	Varoda	1942-43 ..	2,608 20 0	869 20 0	1,956 15 0	3·00	2,032 12 2	923 13 6	2 2 0	730 5 0	357 12 0	1,283 11 6
				(a) 9 28 0				(a)5 0 0				(a)5 0 0
		1943-44 ..	2,482 20 0	827 20 0	1,861 35 0	3·00	2,033 12 0	980 15 0	3 12 0	877 9 0	673 4 3	1,657 15 3
3	Jaigad	1942-43 ..	15,136 0 0	5,035 0 0	11,352 0 0	3·00	3,953 12 0	5,349 11 0	2 0 0	1,999 26 0	954 13 4	6,306 8 4
		1943-44 ..	16,644 0 0	5,560 0 0	12,483 0 0	3·00	6,692 7 7	6,594 3 6	4 12 0	2,305 35 0	1,758 3 8	8,357 3 2
4	Kalbadevi	1942-43 ..	633 0 0	211 0 0	474 30 0	3·00	721 1 6	224 3 6	....	747 36 0	355 3 9	579 6 9
							*87 15 3					
		1943-44 ..	910 20 0	303 20 0	682 35 0	3·00	1,309 11 6	369 1 0	....	907 39 40	364 4 7	733 5 7
				(a)4 34 0			*104 15 3	(a)2 8 0				(a)2 8 0
5	Mirbarwada	1943-44 ..	3,207 0 0	1,067 0 0	2,405 10 0	3·00	1,939 3 5	1,247 12 0	....	1,061 19 0	854 0 6	2,101 12 6

6	Ratnagiri	1942-43 ..	17,460 0 0	5,820 0 0 (a)65 38 32	13,050 0 0	3·00	5,301 10 6 *364 3 6	6,183 12 0 (a)34 0 0	....	4,128 9 0	2,012 8 0	8,196 4 0 (a)34 0 0
		1943-44 ..	19,312 20 0	6,449 20 0 (a)92 6 0	14,484 15 0	3·00	7,290 7 5 *444 10 0	7,678 10 0 (a)47 8 0	2 0 0	3,419 37 0	2,618 6 1	10,299 0 1 (a)47 8 0
7	Purnagad	1942-43 ..	1,173 0 0	391 0 0	879 30 0	3·00	1,584 13 3	415 7 0	9 4 0	1,532 7 0	670 5 3	1,095 0 3
		1943-44 ..	2,538 0 0	846 0 0 (a)19 6 0	1,903 20 0	3·00	2,218 9 6	997 8 0 (a)10 0 0	11 0 0	1,447 30 0	604 10 4	1,613 2 4 (a)10 0 0
8	Jaitapur	1942-43 ..	4,341 0 0	1,447 0 0 (a)77 24 0	3,255 30 0	3·00	2,189 2 8	1,537 7 0 (a)15 0 0	2 8 0	2,807 16 0	1,345 10 0	2,885 9 0 (a)15 0 0
		1943-44 ..	5,644 20 0	1,875 20 0 (a)48 20 0	4,233 15 0	3·00	3,201 10 10	2,152 0 0 (a)25 0 0	*2 12 0	2,437 16 0	1,238 1 9	3,392 13 9 (a)25 0 0
9	Vijaydurga	1942-43 ..	5,038 20 0	1,679 20 0 (a)67 36 0	3,778 35 0	3·00	2,241 8 0	1,784 7 6 (a)35 0 0	5 2 0	1,426 34 0	689 2 7	2,478 12 0 (a)35 0 0
		1943-44 ..	6,340 20 0	2,113 20 0	4,742 30 0	3·00	3,231 8 8	2,459 1 0	4 12 0	1,740 30 40	1,337 12 4	3,801 9 4
10	Mumbri	1942-43 ..	3,454 0 0	763 0 0	2,587 15 0	4·52	1,756 3 5	810 11 0	6 12 0	736 30 0	386 13 0	1,204 4 0
		1943-44 ..	2,252 0 0	553 20 0	1,685 15 0	4·07	1,800 4 11	678 13 6	5 8 0	570 14 0	336 2 10	1,020 8 4
11	Mithbao	1942-43 ..	1,614 10 0	425 0 0 (a)38 32 0	1,210 27 0	3·79	1,239 8 8	451 9 0 (a)20 0 0	0 4 0	915 15 0	473 11 3	925 8 3 (a)20 0 0
		1943-44 ..	2,337 0 0	523 0 0	2,297 0 0	4·47	1,735 4 11	638 0 0	3 5 0	685 29 40	391 1 1	1,032 6 1
	Carried over ..	1942-43 ..	65,060 30 0	21,456 20 0 (a)228 36 72	48,747 39 0		23,822 1 8 *423 0 0	21,999 9 6 (a)118 0 0	25 4 0	15,774 8 0	7,584 2 10	27,608 8 3
		1943-44 ..	65,335 20 0	(a)184 12 0	49,535 10 0		33,696 12 0 *549 9 3	25,301 9 0 (a) 102 8 0	44 7 8	16,466 36 40	10,805 8 6	36,151 9 2 (a)102 8 0

APPENDIX N—*contd.*

Serial No.	Name of the yard.	Year	Quantity of fish brought to be cured.	Quantity of salt issued.	Quantity of fish removed.	Proportion of fish to each maund of salt.	Total expenditure at the yard including pension contribution.	Receipts. Amount realised by sale of salt.	Receipts. Miscellaneous receipts.	Receipts. Stock of salt at the close of the year.	Receipts. Value of salt at the close of the year.	Receipts. Total of columns 9, 10 and 12.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Mds. s. t.	Mds. s. t.	Mds. s. t.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Mds. s. p.	Rs. a. p.	Rs. a. p.
	Brought forward ..	1942-43 ..	65,060 30 0	21,456 20 0	48,747 39 0		23,822 1 8	21,999 9 6	25 4 0	15,774 8 0	7,584 2 10	27,608 8 3
				(*a*)228 36 72			*423 0 0	(*a*)118 0 0				
		1943-44 ..	65,335 20 0		49,535 10 0		33,696 12 0	25,301 9 0	44 7 8	16,466 36 40	10,805 8 6	36,151 9 2
				(*a*)184 12 0			*549 9 3	(*a*)102 8 0				(*a*)102 8 0
	Ratnagiri District—contd.											
12	Achra	1942-43 ..	3,383 0 0	1,084 0 0	2,537 0 0	3·12	1,891 1 8	1,151 12 0	5 2 0	974 16 0	512 0 7	1,668 14 7
		1943-44 ..	2,694 0 0	721 0 0	2,020 20 0	3·74	1,808 10 9	883 1 0	1 12 0	839 24 0	494 11 4	1,389 8 4
13	Talashil	1942-43 ..	3,484 0 0	863 20 0	2,613 0 0	4·03	669 10 0	917 7 6	2 0 0	336 39 0	183 15 5	1,103 6 11
		1943-44 ..	....	52 0 0	....	..	....	55 4 0	....	....	....	55 4 0
14	Malwan	1942-43 ..	34,708 20 0	8,021 0 0	26,031 5 0	4·32	7,889 13 0	8,522 5 0	314 1 7	5,556 30 0	2,708 15 2	11,545 5 9
				(*a*)24 10 0				(*a*)18 8 0				(*a*)18 8 0
		1943-44 ..	29,974 0 0	6,674 0 0	22,480 20 0	4·49	7,868 3 9	7,894 15 0	176 8 0	4,740 25 0	3,756 15 0	11,828 6 0
				(*a*)101 34 0				(*a*)55 0 0				(*a*)55 0 0

15	Deobag	1942-43 ..	21,487 20 0	6.400 0 0	16,667 5 0	3·35	4,969 2 0	6,800 0 0	20 14 6	3,669 7 36	1,780 3 0	8,601 1 6
		1943-44 ..	9,798 0 0	2,628 0 0	6,154 0 0	3·73	3,503 11 3	3,168 3 0	10 4 0	2,931 16 50	1,539 0 1	4,717 7 1
				(*a*)58 8 0				(*a*)30 0 0				(*a*)30 0 0
16	Mobar	1942-43 ..	13,594 0 0	3,932 0 0	10,187 0 0	3·45	3,962 3 9	4,177 12 0	5 3 0	2,655 28 40	1,287 15 9	5,471 13 9
		1943-44 ..	7,502 0 0	1,956 0 0	5,644 0 0	3·84	3,282 1 1	2,329 11 0	5 12 0	2,661 13 0	1,546 14 9	3,882 5 9
17	Kochra	1942-43 ..	3,693 0 0	897 0 0	2,769 30 0	4·11	1,968 7 0	953 1 0	0 11 0	742 35 0	362 2 5	1,315 14 5
		1943-44 ..	4,989 20 0	1,442 20 0	3,742 5 0	3·46	2,889 0 0	1,697 15 0	9 4 0	853 0 0	657 7 9	2,364 10 9
18	Vengurla	1942-43 ..	25,843 0 0	8 455 0 0	19,382 10 0	3·05	6,916 5 3	8,983 7 0	10 0 0	3,016 11 0	1,504 5 11	10,497 12 11
				(*a*)119 12 40			202 15 0	(*a*)127 8 0				(*a*)127 8 0
		1943-44 ..	6,769 0 0	2,159 0 0	5,077 0 0	3·14	5,072 5 6	2,677 0 0	17 13 0	3,699 10 32	2,773 4 11	5,468 1 11
				(*a*)938 38 8			*231 7 3	(*a*)415 8 0				(*a*)415 8 0
19	Shiroda	1942-43 ..	17,627 0 0	4,398 0 0	13,220 10 0	4·00	4,525 5 0	4,672 14 0	18 3 0	2,110 1 40	1,091 15 0	5,783 0 0
				(*a*)30 2 64				(*a*)15 8 0				(*a*)15 8 0
		1943-44 ..	7,037 0 0	2.159 0 0	5,345 0 0	3·27	3,979 7 3	2,677 15 6	45 5 4	2,222 29 0	1,785 1 3	4,508 6 1
				(*a*)43 26 0				(*a*)22 8 0				(*a*)22 8 0
	Total for Ratnagiri District	1942-43 ..	179,119 10 0	51,966 20 0	134,835 22 0	..	55,524 13 10	55,214 6 6	414 8 1	35,270 18 36	17,242 12 7	72,871 11 2
				(*a*)482 3 56			*655 1 9	(*a*)295 8 0				(*a*)295 8 0
		1943-44 ..	134,098 40 0	39,114 20 0	99,998 15 0	..	62,100 3 7	46,685 9 6	311 2 0	34,414 34 42	23,358 15 7	70,355 11 1
				(*a*)1,326 38 8			*781 0 6	(*a*)625 8 0				(*a*)625 8 0

APPENDIX N—*contd.*

Serial No.	Name of the yard.	Year.	Quantity of fish brought to be cured.	Quantity of salt issued.	Quantity of fish removed.	Proportion of fish to each maund of salt.	Total expenditure at the yard including pension contribution.	Receipts. Amount realised by sale of salt.	Receipts. Miscellaneous receipts.	Receipts. Stock of salt at the close of the year.	Receipts. Value of salt at the close of the year.	Receipts. Total of columns 9, 10 and 12.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Mds. s. t.	Mds. s. t.	Mds. s. t.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Mds. s. t.	Rs. a. p.	Rs. a. p.
	Kanara District.											
20	Majali	1942-43 ..	26,022 36 0	6,631 0 0	20,290 11 0	3·92	4,645 6 0 *195 6 6	7,045 7 0	89 10 9	1,298 38 0	579 10 7	7,714 11 7
		1943-44 ..	29,979 20 40	8,160 20 0	23,107 38 0	3·67	8,243 3 6 *79 11 3	10,182 1 0	46 0 0	1,837 26 0	1,146 3 9	11,374 4 9
21	Karwar (Baitkhol) ..	1942-43 ..	69,487 37 0	18,632 0 0 (*a*)113 19 28	53,508 20 0	4·17	10,302 4 0	19,796 8 0 (*a*)58 8 0	222 0 0	1,992 25 0	886 1 3	20,904 9 3 (*a*)58 8 0
		1943-44 ..	43,356 33 0	13,229 20 0 (*a*)14 22 0	32,863 34 0	3·20	12,444 2 8	16,487 4 6 (*a*)7 8 0	109 4 0	2,331 29 0	1,411 11 4	18,008 3 10 (*a*)7 8 0
22	Bingi	1942-43 ..	61,957 20 0	19,775 20 0	42,192 0 0	3·13	11,614 8 0 *231 9 0	21,011 7 6	16 4 0	1,771 17 0	790 7 11	21,818 3 5
		1943-44 ..	38,589 0 0	11,710 0 0 (*a*)27 7 0	26,979 0 0	3·29	11,149 7 7 *49 2 0	14,569 1 0 (*a*)14 0 0	8 10 0	1,778 8 0	1,089 2 3	15,666 13 3 (*a*)14 0 0

23	Chendia	1942-43 ..	41,749 20 0	12,389 20 0	29,404 0 0	3·37	7,376 14 0 *47 13 0	13,163 13 6	15 12 0	2,064 0 0	908 3 0	14,087 12 6
		1943-44 ..	33,801 20 0	10,589 20 0	25,736 0 0	3·19	10,005 7 8 *49 8 0	13,205 0 0	26 8 0	1,954 30 0	1,167 15 5	14,399 7 5
24	Kodar	1942-43 ..	1,989 20 0	617 20 0	1,412 0 0	3·22	924 5 3	656 1 6	0 6 0	886 14 0	393 6 1	1,049 13 7
		1943-44 ..	4,085 20 0	1,348 20 0	3,064 5 0	3·03	2,296 9 9	1,684 0 6	3 13 0	1,697 39 0	904 11 8	2,592 9 2
25	Harwada	1942-43 ..	27,247 20 0	8,246 0 0	19,087 0 0	3·30	5,290 6 5 *45 14 0	8,761 6 0	6 6 0	1,134 15 0	509 0 9	9,276 6 9
		1943-44 ..	23,219 20 0	6,833 0 0	16,428 15 0	3·40	6,524 13 6 *78 8 9	8,499 2 6 (a)12 8 0	12 5 0	933 2 0	565 10 7	9,077 2 1 (a)12 8 0
26	Keni	1942-43 ..	4,737 20 0	1,244 20 0 (a)53 14 0	3,415 0 0	3·80	1,579 10 9 *100 5 5	1,322 4 6 (a)27 8 0	6 10 0	1,376 26 0	600 0 4	1,928 14 10 (a)27 8 0
		1943-44 ..	4,110 0 0	1,243 20 0	2,867 0 0	3·31	2,496 10 2 *98 6 9	1,554 6 0 (a)7 0 0	1 13 10	1,723 34 0	1,086 0 5	2,642 4 3 (a)7 0 0
27	Gangawali	1942-43 ..	4,338 0 0	1,126 0 0	3,253 20 0	3·85	1,222 10 4	1,196 6 0	....	590 10 0	257 7 8	1,453 13 8
		1943-44 ..	4,572 20 0	1,370 20 0	3,480 20 0	3·34	2,120 2 3	1,710 5 0	12 2 0	973 29 0	584 4 0	2,306 11 0
	Carried over	1942-43 ..	65,589 10 0	18,998 20 0 (a)166 33 28	48,642 29 0		18,243 14 2 *292 1 10	72,953 6 0 (a)86 0 0	654 15 2	12,243 6 46	5,330 12 3	78,939 1 5 (a)86 0 0
		1943-44 ..	1,81,714 13 40	54,485 0 0 (a)41 29 0	1,34,526 32 0		55,280 9 1 *355 4 9	67,891 4 6 (a)41 0 0	220 7 10	13,230 37 0	7,955 11 5	76,C67 7 9

APPENDIX N—*concld*

Serial No.	Name of the yard.	Year.	Quantity of fish brought to be cured.	Quantity of salt issued.	Quantity of fish removed.	Proportion of fish to each maund of salt.	Total expenditure at the yard including pension contribution.	Receipts.				
								Amount realised by sale of salt.	Miscellaneous receipts.	Stock of salt at the close of the year.	Value of salt at the close of the year.	Total of columns 9, 10 and 12.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Mds. .. t.	Mds. s. t.	Mds. .. t.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Mds. s. t.	Rs. a. p.	Rs. a. p.
	Brought forward ..	1942-43 ..	65,589 10 0	18,998 20 0	48,642 29 0		18,243 14 2	72,953 6 0	654 15 2	12,243 6 46	5,3[illegible]0 12 3	78,939 1 5
				(a)166 33 28			*292 1 10	(a)85 0 0				(a)86 0 0
		1943-44 ..	1,81,714 13 40	54,485 0 0	1,34,526 32 0		55,280 9 1	67,891 4 6	220 7 10	13,230 37 0		
				(a)41 29 0			*355 4 9	(a)41 0 0				
	Kanara District—contd.											
28	Kumta	1942-43 ..	2,166 20 0	472 20 0	1,502 20 0	4·53	873 13 7	502 0 6	0 8 0	793 21 0	326 11 10	829 4 4
				(a)97 0 0			*121 9 2	(a)50 0 0				(a)50 0 0
		1943-44 ..	1,530 0 0	430 0 0	919 20 0	3·56	1,173 10 2	518 15 0	....	747 39 0	260 5 7	779 4 7
							*442 0 3					
29	Mallukurwa	1942-43 ..	7,125 0 0	1,425 0 0	5,343 30 0	5·0	2,189 3 0	1,514 1 0	27 6 0	2,096 32 0	1,009 1 3	2,550 8 3
							*107 8 9					
		1943-44 ..	7,107 20 0	1,421 20 0	5,330 25 0	5·00	2,035 10 2	1,667 12 0	38 6 6	1,852 16 64	781 12 6	2,487 15 0
				(a)3 35 16			*101 8 6	(a)2 0 0				(a)2 0 0
30	Manki	1942-43 ..	4,810 0 0	1,067 0 0	3,802 0 0	4·50	1,352 5 0	1,133 11 0	17 0 0	1,018 0 0	464 7 4	1,635 2 4
		1943-44 ..	6,537 0 0	1,409 0 0	5,190 0 0	4·64	2,292 8 11	1,640 11 0	17 0 0	1,147 33 0	740 4 6	2,397 15 6

31	Murdeshwar	1942-43 ..	7,880 10 0	1,364 10 0	6,624 30 0	5·77	1,394 3 8 *54 5 6	1,449 12 6	29 12 0	514 18 0	234 11 5	1,714 3 11
		1943-44 ..	6,152 0 0	1,526 0 0	4,620 20 0	4·03	2,606 3 11 *57 12 3	1,895 8 0	26 0 0	1,033 10 0	643 3 2	2,564 11 2
32	Shirali	1942-43 ..	7,608 0 0	1,582 0 0	6,026 0 0	4·80	1,906 0 10 *101 13 3	1,680 14 0	15 0 0	1,420 7 0	644 6 3	2,340 4 3
		1943-44 ..	11,919 20 0	3,566 20 0	7,568 0 0	3·34	3,911 7 3 *86 2 6	4,423 7 0	15 0 0	1,621 38 0	1,013 11 6	5,452 2 6
33	Bhatkal	1942-43 ..	1,657 0 0	374 0 0	1,266 0 0	4·43	699 1 6 *120 5 9	397 6 0	18 0 0	1,095 3 0	435 15 1	851 5 1
		1943-44 ..	1,554 0 0	455 0 0	1,102 0 0	3·42	1,401 4 0 *111 9 3	561 13 0	21 15 0	1,318 23 0	497 1 10	1,010 13 10
	Total for Kanara District	1942-43 ..	268,777 3 0	74,947 0 0 (a)263 33 28	197,127 11 0	..	51,370 10 4 *1,136 10 4	79,631 3 0 (a)136 0 0	464 10 9	18,452 26 0	8,039 10 9	88,135 8 6 (a)136 0 0
		1943-44 ..	216,514 13 40	63,293 0 0 (a)45 24 16	159,257 17 0	..	68,705 5 6 *1,154 5 6	78,599 6 6 (a)43 0 0	338 13 4	20,952 36 64	11,892 2 6	90,850 6 4 (a)43 0 0
	Total for Ratnagiri and Kanara Districts.	1942-43 ..	447,896 13 0	126,913 20 0 (a)745 37 4	331,962 33 0	..	106,895 8 2 *1,791 12 1	1,34,845 9 6 (a)431 8 0	879 2 10	53,323 4 36	25,282 7 4	1,61,007 3 8 (a)431 8 0
		1943-44 ..	350,612 40 53	102,407 20 0 (a)1,372 22 24	257,255 22 0	..	1,30,801 9 6 *1,935 6 0	1,25,285 0 0 (a)668 8 0	649 15 4	55,367 31 26	35,181 2 0	1,61,115 11 5 (a)668 8 0

APPENDIX O.

Recognised Technical and Industrial Institutions in the Bombay Province.

List of Technical and Industrial Institutions in Bombay Division with the amounts of Grants paid to them during the year 1943-44.

No.	Institution	Grant-in-aid paid in 1944. Rs.
1.	The Government Tanning Institute, Bandra	....
2.	The Government Leather Working School, Bandra	....
3.	The School of Industry, Ratnagiri	....
4.	The Primary Handicraft Classes, Bombay	295
5.	The R. H. Patuck Ind. School, Andheri	1,232
6.	The Ladies' Tailoring class attached to Bhagini Samaj, Bombay	212
7.	The Dadar School for the Blind, Bombay	1,173
8.	The Textile Technical School, Bombay	2,447
9.	The N. S. D. Industrials Home for the Blind, Bombay	792
10.	The Ladies' Tailoring class attached to Lokmanya Seva Sangh, Vile-Parle	122
11.	The Abdulla Fazalbhoy Technical Institute, Bombay	1,739
12.	The Khalsa College Technical Institute, Bombay	1,000
13.	The A. P. Sonawalla Industrial School, Bordi	887
14.	The K. E. S. Topiwalla Industrial School, Alibag	1,900
15.	The Industrial Classes attached to V. K. High School, Panvel	297
16.	The St. Barnabas Industrial School, Manmad	798
17.	The Madhavrao Rokde Municipal Central School, Bombay 3	....
18.	The Girgaon Municipal Central School, Bombay 4	....
19.	The Lamington Municipal Central School, Bombay 7	....
20.	The Kamathipura Central School, Bombay 8	....
21.	The Foras Road Municipal Central School, Bombay 8	....
22.	The Dongri Municipal Central School, Bombay 9	....
23.	The Ghodapdeo Municipal Central School, Bombay 10	....
24.	The Parel Municipal Central School, Bombay 12	....
25.	The Lady Jamshedji Road Municipal Central School, Bombay 14	....
26.	The Roman Catholic Mahim Municipal Central School, Bombay 16	....
27.	The Khetwadi Municipal Central School, Bombay 4	....
28.	The Radio Electric Institute, Bombay	....
29.	The E. M. F. Radio Institute, Bombay	....
30.	The Institute of Radio Technology, Bombay	....
31.	The Institute Indo Portuguese, Bombay	....
32.	The Mahila Kala Mandir, Bombay	....
33.	The Bombay Technical Institute, Bombay	....
34.	The Gujerati Hindu Stree Mandal, Bombay	....
35.	The Mahomed Haji Saboo Siddik Institution, Bombay	....
36.	The B. N. Gamadia Parsi Hunnar Shala, Bombay	....
37.	J. N. Petit Parsi Orphanage, Bombay	....
38.	The Zarapkar Tailoring and Cutting Institute, Bombay	....
39.	The David Sassoon Industrial School, Bombay	....
40.	The Bai Avabai Framji Petit Parsee Girls' Orphanage, Bandra	....
41.	The Industrial Classes attached to Marine College and Seamen's Orphanage, Novha, Bombay Harbour.	
42.	The Mahila Kala Bhuvan, Bombay	....
43.	The Mahila Shivan Kala Mandir, Malvan	....

S. No. 27—The Khetwadi Municipal Central School, Bombay—Industrial section was closed, and the name is being removed from 1st April 1944.

S. No. 29—E. M. Radio Institute, Bombay—This does not impart instruction in the courses approved by the Board, and recognition is being withdrawn from 1st April 1944.

S. No. 33—The Bombay Technical Institute, Bombay—The Institute is closed and recognition has been withdrawn from 1st April 1943.

S. No. 38—Zarapkar Tailoring and Cutting Institute, Bombay—Recognition has been withdrawn from 10th December 1943.

List of Technical and Industrial Institutions in Central Division with the amounts of Grants paid to them during the year 1943-1944.

	Grand-in-aid paid in 1944. Rs.
1. Government Powerloom Weaving Instructional Institute, Sholapur	....
2. The Yeravada Industrial School, Poona	....
3. The Industrial Settlement School, Sholapur	....
4. The V. J. Municipal Technical School, Poona	2,915
5. The Mission Workshops and Industrial School, Poona	491
6. The Maharashtra Mudran Shala, Poona	840
7. The D. E. Society's Technical Institute, Poona	950
8. The Sir Cusrow Wadia Institute of Electrical Technology, Poona	4,347
9. The School of Radio Physics and Electronics, Poona	2,359
10. The Poona School and Home for the Blind	390
11. The Sir D. M. Petit Industrial School, Sirur, Poona	608
12. The District Local Board Industrial School, Satara	1,037
13. The Municipal Technical School, Sholapur	1,505
14. The Robertson School of Industry, Pandharpur	806
15. The Salvation Army Boys' Industrial School, Ahmednagar	391
16. The Industrial Classes attached to Modern High School, Ahmednagar	277
17. The King Edward VII Technical School, Dhulia	4,848
18. The R. G. Tamhankar's wireman Class, Ahmednagar	....
19. The Jadhav College of Tailoring and Cutting, Poona	....
20. The Godbole's Photographic Classes, Poona	....
21. The Mechanical and Electrical Engineering School, Pandharpur	....
22. The Variety Tailoring and Cutting Academy, Poona	....
23. The Saraswatibai Godbole's Tailoring Class, Poona	....

S. No. 18—R. G. Tamhankar's Wiremen's Class, Ahmednagar—This does not impart instructions in the courses approved by the Board, and recognition is being withdrawn from 1st April 1944.

S. No. 19—The Jadhav College of Tailoring and Cutting, Poona—Institution is closed and name has been removed from the list from 1st April 1944.

List of Technical and Industrial Institutions in Northern Division with the amounts of Grants paid to them during the year 1943-44.

	Grant-in-aid paid in 1944. Rs.
1. The R. C. Technical Institute, Ahmedabad	....
2. The S. A. Boys' Boarding and Industrial School, Kaira Camp	527
3. The I. P. Mission Industrial School, Borsad	676
4. The Vocational Training School, Ankleshwar	800
5. The F. S. Parekh Technical Institute, Surat	6,000
6. The Mahajan Home Industrial School, Khatergaum	....
7. The Seth C. N. Industrial School, Ahmedabad	....
8. The Talimikendra Jyoti Sangh, Ahmedabad	....
9. The Ideal Tailor and Cutter Institute, Ahmedabad	....
10. The Jamnabai Saraswati Mandir, Ahmedabad	....
11. The Parsi Technical and Industrial Institute, Surat	....

List of Technical and Industrial Institutions in Southern Division.

	Rs.
1. The Industrial Settlement School, Hubli	....

List of Technical and Industrial Institutions in Indian States.

1. The Morvi Technical Institute, Morvi.

S. No. 6—(Northern Division)—Mahajan Home and Industrial School—Recognition of this Institution has been withdrawn from 1st April 1944.

APPENDIX P.

List of approved Courses of Instruction.

	Duration.
(A) *" Dip. Tech." Diploma Courses.*	
1. Electrical Technology	3 Years
2. Radio Communication	2 Years
3. Paints Technology	2 Years
(B) *Certificate Courses.*	
(I) *Engineering.*	
1. Mechanical Engineering	3 Years
2. Mechanical Apprentice	2 Years
3. Electrical Engineering	3 Years
4. Radio Service Work	1 Year
5. Wireless Telegraphy	1 Year
6. Electrician's Course	1 Year
7. Wireman Apprentices' Course	1 Year
8. Electroplating and Battery Charging	1 Year
9. Sound Recording	2 Years
10. Projectionist's Course	1 Year
11. Automobile Engineering	3 Years
12. Automobile Apprentice	2 Years
13. Internal Combustion Engineering	3 Years
14. Trained Maistry	1 Year
15. Carpentry	3 Years
16. Woodturning and Lacquerwork	2 Years
17. Agricultural Carpentry and Smithy	2 Years
(II) *Textile Manufacture.*	
1. Higher Grade Cotton Spinning and Cotton Weaving	3 Years
2. Lower Grade Cotton Spinning and Cotton Weaving	3 Years
3. Powerloom Weaving	1 Year
4. Handloom Weaving	2 Years
5. Dyeing and Calico Printing	2 Years
(III) *Chemistry and Chemical Engineering.*	
1. Photography	1 Year
2. Cine Photography	2 Years
3. Advance. Leather Manufacture	1 Year
3*a*. Artisan's Leather Manufacture	1 Year
4. Handmade Papermaking	1 Year
(IV) *Miscellaneous Trade Courses.*	
1. Tailoring and Cutting	1 Year
2. Practical Tailoring	3 Years
3. Ladies Tailoring	2 Years
4. (*i*) Advanced Footwear Miscellaneous Leather goods Manufacture	2 Years
(*ii*) Artisan's Footwear Manufacture	2 Years
(*iii*) Artisan's Miscellaneous Leather goods Manufacture	2 Years
5. Typography (Compositing and Printing)	3 Years

APPENDIX Q.

Expenditure on and Receipts from the R. C. Technical Institute, Ahmedabad, for the year 1943-44.

Credit. *Debit.*

Particulars.	Amount. Rs. a. p.	Particulars.	Amount. Rs. a. p.
1. Sale proceeds of articles etc. ..	69 1 9	1. Pay of Officers (Principal) ..	7,800 0 0
2. Fees from students ..	2,667 0 0	2. Pay of Establishment—	
3. Sale proceeds of crowly cart ..	200 0 0	Teachers	13,785 9 0
4. Refund of cost of steam coal ..	285 0 0	Clerks	1,429 5 0
5. Miscellaneous	2 0 0	Peons	426 0 0
		Leave salary	136 0 0
		Dearness allowance ..	2,095 4 0
Rs. ..	3,223 1 9	3. Wages to workmen	....
		4. Allowance (Travelling Allowance) Honoraria etc. ..	50 12 0
Less—		5. Scholarships to Governent Scholars	325 12 0
Bill of refund for returning fees as		Scholarships to backward students	56 0 0
freeships	140 0 0	6. Stores purchased	1,392 15 3
		7. Other Miscellaneous—	
		Salary of menials from ..	2,280 5 0
		Dearness Allowance paid to menials from contingencies ..	1,145 8 0
		Contingencies	606 15 0
		Tax paid to Municipality ..	2,630 7 0
Total ..	3,083 1 9	Total ..	34,160 12 3

APPENDIX R.

Expenditure on and Receipts from the School of Industry, Ratnagiri, for the year 1943-44.

Credit. *Debit.*

Particulars.	Amount. Rs. a. p.	Particulars.	Amount. Rs. a. p.
1. Sale proceeds of articles, prepared in the school	2,785 12 0	1. Pay of establishment ..	8,453 1 0
2. Refund of pay of other staff ..	9 5 0	2. Store keeper allowance ..	60 0 0
		3. Dearness allowance ..	1,214 6 0
		4. Raw materials (contingencies) ..	1,349 4 0
		5. Consumable stores contingency ..	1572 12 3
		6. Miscellaneous contingency ..	49 8 6
		7. Rent, rates, taxes contingency ..	106 0 0
		8. Service postage and telegrams etc.	20 0 0
		9. Apparatus, equipment etc. ..	793 3 0
		10. Government scholarships ..	665 0 0
Total ..	2,795 1 0	Total ..	14.283 2 9

APPENDIX S.

Expenditure on and Receipts from the Government Tanning Institute, Bandra, Bombay 20, for the year 1943-44.

Credit. Particulars.	Amount.	*Debit.* Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of tanned hides, skins and glue	6,298 5 3	1. Pay of Officers	....
2. Fees from students ..	400 8 0	2. Pay of Establishment ..	7,960 11 0
3. Supply to Leather Working School, Bandra	301 8 9	3. Wages to workmen ..	259 15 0
4. Miscellaneous Receipts ..	24 4 0	4. 5. Allowances and Honoraria ..	206 14 0
		6. Scholarships	5,951 3 0
		Stores Purchased (raw materials and chemicals)	7,619 11 6
		7. Other miscellaneous expenses ..	3,258 7 0
		8. Dearness allowance ..	1,419 0 0
Total ..	7,024 10 0	Total ..	26,675 13 6

APPENDIX T.

Expenditure on and Receipts from the Government Leather Working School, Bandra, Bombay, 20, for the year 1943-44.

Credit. Particulars.	Amount.	*Debit.* Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds of articles ..	2,788 10 3	1. Pay of Officers	2,915 0 0
2. Fees from students ..	150 0 0	2. Pay of establishment ..	3,931 8 0
		3. Wages of workmen	....
		4. Allowances and Honoraria ..	969 13 0
		5. Dearness allowance	726 8 0
		6. Scholarships	4,058 12 0
		7. Stores purchased (Raw materials and chemicals)	439 13 1
		8. Other miscellaneous ..	680 1 9
Total ..	2,938 10 0	Total ..	13,721 7 10

APPENDIX U.

Expenditure on and Receipts from the Government Power Weaving Instructional Institute, Sholapur, for the year 1943-44.

Credit. Particulars	Amount.	*Debit.* Particulars.	Amount.
	Rs. a. p.		Rs. a. p.
1. Sale proceeds from articles etc. ..	....	1. Pay of officers	....
2. Fees from Students ..	....	2. Pay of establishment, *i.e.*, Teaching staff	4,535 2 0
3. Miscellaneous	38 0 0	3. Wages of workmen	91 9 0
		4. Allowances and Honoraria Dearness Allowance	400 14 0
		5. Scholarships	1,058 0 0
		6. Stores Purchased to add the cost of accessories.	2,437 12 0
		7. Miscellaneous	3,330 13 6
Total ..	38 0 0	Total ..	11,854 2 6

APPENDIX V.

Statement showing the number of wagons recommended by the Provincial Coal Controller under the Provincial Distribution Scheme during the year 1943-44.

Month.	Dealers and Merchants			Industries not on war work etc.			Total			Grand total.
	Steam Coal	Hard Coke	Soft Coke	Steam Coal.	Hard Coke.	Soft Coke.	Steam Coal.	Hard Coke.	Soft Coke.	
April 1943 ..	Normal priority supply suspended by the Controller of Coal Distribution, Calcutta.									
May " ..	326	107	..	259	44	..	585	151	..	736
June " ..	294	98	8	294	51	4	588	149	12	749
July " .. / August " ..	Normal priority supply suspended by the Controller of Coal Distribution, Calcutta.									
September (Spl.) " ..	25	86	1	27	11	..	52	97	1	150
October " ..	Normal priority supply suspended by the Controller of Coal Distribution, Calcutta.									
November " ..	127	85	8	93	35	2	220	120	10	350
December " ..	131	93	8	89	27	2	220	120	10	350
January 1944 ..	124	89	8	96	32	2	220	121	10	351
February " ..	104	91	7	116	29	3	220	120	10	350
March	110	96	8	110	24	2	220	120	10	350

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